ATLANTIC FISHERMAN

NOVEMBER
1949

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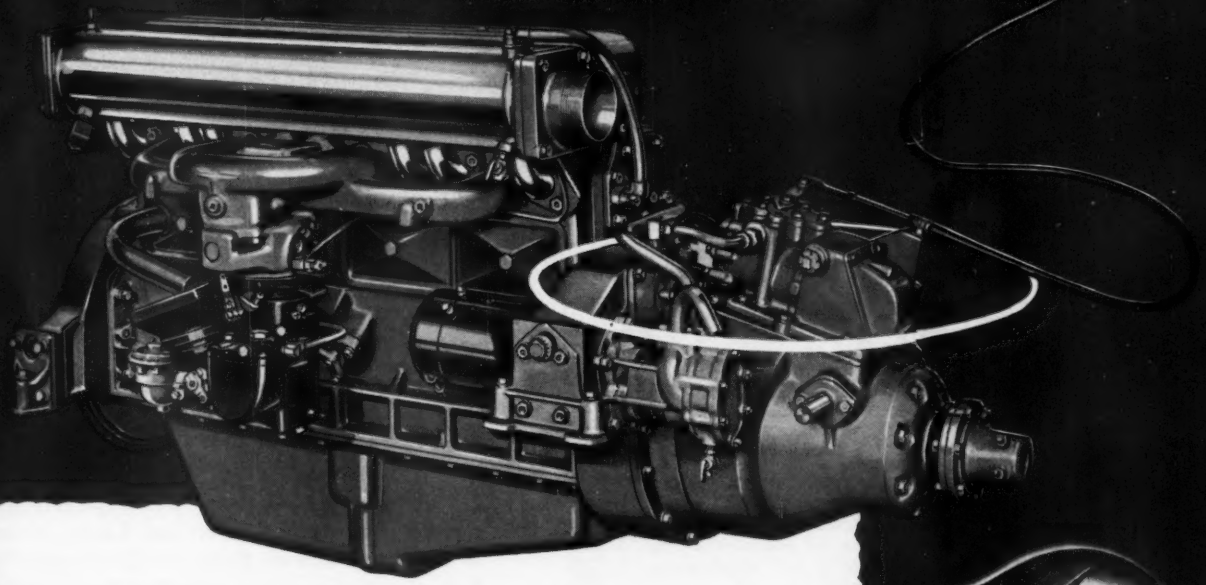

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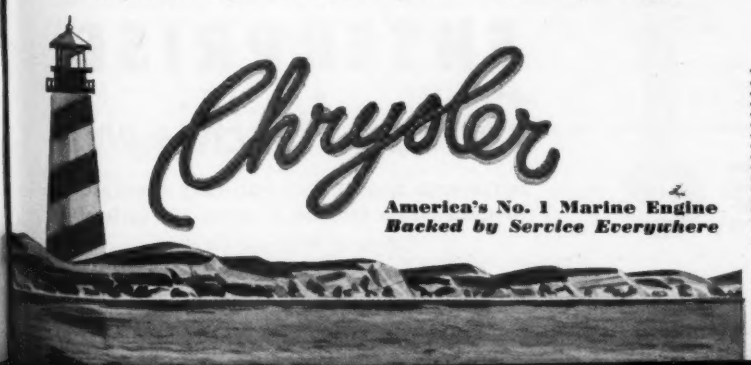

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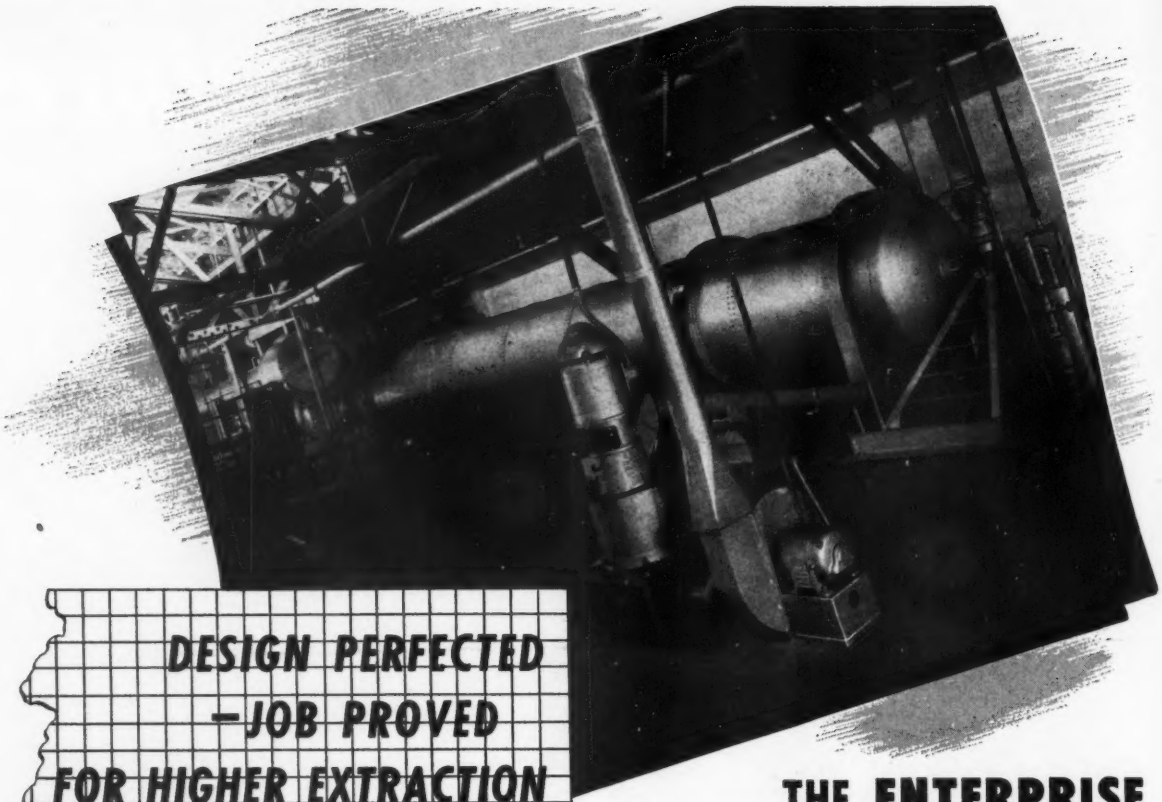

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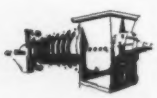

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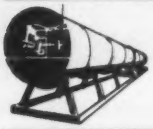

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State vs. Federal Control Within three-mile Limit

The Long Island Fishermen's Association, in its October Bulletin, published some interesting comments on the "Fight Over Jurisdiction" from which we quote:

"The dragger fishermen out of New Bedford are going to make a test case as to whether the State of Massachusetts or the Federal Government has jurisdiction over both the waters and the bottom extending three miles to sea.

"If they go through with their plans, it certainly will be of interest to learn what decision the courts hand down. This probably would result in a Supreme Court decision.

"Generally speaking, fishermen feel that only the Federal Government has jurisdiction in the marine districts of their respective States. This may in some instances prove beneficial and in some instances wholly adverse to commercial fishing interests. If it is learned that all tidewater and bottoms thereof belong to the Federal Government, fishermen would then have to operate under rules and regulations set down by the Federal Government. It might be well to reflect whether we would like to have the Federal Government take over complete jurisdiction.

"We still believe in State's rights and it apparently would seem better to have legislation enacted by the Legislature rather than to have a list of rules and regulations made in Washington whereby the fisheries would be completely dominated.

"We have just learned that commercial shrimp fishermen of the State of South Carolina have made vigorous protests because several operators have been arrested for violations of the shrimp laws in that State. Their contention is that the State has no jurisdiction over tidal waters and so they, too, are contemplating making an appeal to the U. S. Supreme Court with the hope that this court will rule in their favor.

"Fishermen must realize that there always will be laws regardless of whether they are State or Federal. At present, we in New York State, have all our conservation laws made at Albany, and at least we have a chance to appeal to the Legislature and also the Governor, in the event adverse legislation is either introduced or passed.

"If the Federal Government takes over, the natural assumption is that the U. S. Fish & Wildlife Service would be given regulatory powers. In other words, they would not have to go to Congress to have laws passed, but they themselves would be enabled to set up rules and regulations in regard to size limits, prohibited areas, size of mesh, etc. One can imagine what chance the net fishermen and shellfishermen would stand in New York State if we were to become lost in the shuffle.

The opinions expressed in the Long Island Fishermen's Association article have merit, and these views on Federal vs. State control should be carefully considered by all segments of the industry.

One situation in which some persons might feel that the Federal Government should exercise control is where there is a conflict between the laws of adjacent States. For example, there are some areas where the grounds for certain types of fish and shellfish are bounded by two or more States. If the conservation programs of the States concerned do not complement one another, the work done by one State may be largely offset by lack of proper action by neighboring States.

However, the industry has organizations for handling interstate fisheries matters, namely, the Atlantic States Marine Fisheries Commission and the Gulf States Marine Fisheries Commission. These bodies were set up to foster cooperation and recommend joint legislation between two or more States. These Commissions, with membership representing industry and Government in each State, are in an ideal position to discuss and analyze conservation requirements of the fisheries.

Of course, it would be desirable to consider the opinion of Federal agencies, such as the Fish & Wildlife Service. Certainly the industry should take full advantage of the Federal research facilities, and the scientific findings of all groups should be properly coordinated before any regulatory action is taken.

In general, problems dealing with fisheries within the 3-mile limit are of local or regional concern, and it would be advisable to have the States retain control over such areas.

ATLANTIC FISHERMAN

REGISTERED U. S. PATENT OFFICE

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Sounding-Lead

FILLET IMPORTS DOWN—Imports of cod, haddock, hake, pollock, cusk, and rosefish (ocean perch) fillets during September amounted to 2,210,500 lbs. This was 36% less than the imports for the previous month, and 46% less than those for September, 1948.

Total imports of these fillets during the first nine months of 1949 amounted to 34,959,000 lbs.; compared with 41,332,800 lbs. received during the same period in 1948.

Imports of shrimp from Mexico into the United States during the month of September amounted to 972,400 lbs. The accumulated total for January through September this year is 16,239,800 lbs., while for the same period in 1948 the total was 11,940,500 lbs.

The Customs Bureau reported that 10,500 lbs. of shrimp were also imported during September from the Bahamas through the Florida Customs District.

FROZEN FISH HOLDINGS—Cold storage holdings of frozen fish and shellfish in the United States on November 1 totalled 157,554,000 lbs., compared to 148,049,000 lbs. on the same date a year ago. Among items showing increases were rosefish fillets which jumped 801,000 to 13,856,000 and pollock fillets which gained 226,000 to total 1,155,000. Whiting fillets, including split butterfly, were 3,987,000 on November 1 of this year compared to 1,836,000 a year ago, while headed and gutted whiting went from 9,707,000 to 21,770,000 lbs. Round whiting, however, dropped from 6,172,000 to 1,735,000.

Holdings showing decreases included round cod, haddock, hake and pollock which dropped 895,000 lbs. compared to Nov. 1, 1948; cod fillets, down practically a million lbs. to 6,818,000; haddock fillets, which totalled 5,269,000 this year or 1,424,000 less than last November; mackerel, down 2,168,000 to only 1,068,000; scup which was off 589,000 lbs. for a total of 531,000 lbs. November 1; swordfish, down to 1,144,000, a decrease of 506,000; and smelt, which totalled 1,077,000, a drop of 415,000.

The amount of fish and shellfish frozen during the month of October of this year totalled 24,545,000 compared to 27,113,000 for the same month of 1948. Cod and haddock fillets showed a 50% drop, and rosefish fillets decreased 25%, while whiting fillets including split butterfly were 3 times as large and headed and gutted whiting showed a 250% gain over last year.

Holdings of whitefish, the major fresh-water variety in storage, totalled 2,506,000 lbs. on Nov. 1 as against 1,772,000 a year before. Frozen shrimp on hand the first of this month totalled 12,391,000 lbs., approximately the same amount as a year ago.

WAGE-HOUR LAW—Both Houses of Congress adopted the conferees' report and the amended Wage-Hour Law placing fish canning under the minimum 75c-per-hour provision of the Act. However, nothing in the new amendments provide for overtime above the minimum wage for this operation. Other fish and shellfish operations remain exempt the same as in the existing law. Effective date will be 90 days from final enactment.

The conference report spelled out fish and shellfish canning as follows: "Under the conference agreement 'canning' means hermetically sealing and sterilizing or pasteurizing and has reference to a process involving the performance of such operations. It also means other operations performed in connection therewith such as necessary preparatory operations performed on the products before they are placed in bottles, cans, or other containers to be hermetically sealed, as well as the actual placing of the commodities in such containers. Also included are subsequent operations such as the labeling of the cans or other containers and the placing of sealed containers in cases or boxes whether such subsequent operations are performed as a part of an uninterrupted or interrupted process. It does not include the placing of such products or by-products thereof in cans or other containers that are not hermetically sealed as such an operation is 'processing' as distinguished from 'canning' and comes within the complete exemption contained in section 13 (a)."

DEMAND GOOD— The early season demand for oysters has exceeded all recent experience. Many packers were compelled to start operations several weeks earlier than usual, and some packers have experienced difficulty in filling all orders received.

During the third week of last month, five important fillet products (skinless cod, flounder, haddock, pollock and ocean perch) showed a movement out of freezers at the rate of 27% over the corresponding week last year and 30% greater than the previous period.

MONARK EGG CASE— A favorable decision has been made by the Interstate Commerce Commission in concluding the Monark Egg Case which has been the subject of unfortunate rulings that only fish and shellfish as they came from the water were included in the fishery exemption in Section 203(b)(6) of the 1938 Motor Carriers Act. Under the new ruling, trucks carrying fresh and frozen fish, provided they do not carry for compensation any passengers and property other than exempt property as defined in Section 203(b)(6) of the Interstate Commerce Act, are now exempt from regulations of the I.C.C.

The Commission's decision is as follows: "On further consideration, we find that the term 'fish (including shellfish)' as used in Section 203(b)(6) of the Interstate Commerce Act, includes frozen, quick frozen, and unfrozen fish in the various forms in which it is shipped, such as live fish, fish in the round, beheaded and gutted fish, filleted fish, beheaded shrimp, and oysters, clams, crabs, and lobsters, with or without shells, including crabmeat and lobster meat, but excluding fish in hermetically sealed containers or fish which has been otherwise treated for preserving such as smoked, salted, pickled, spiced, corned, or kippered."

According to Dr. Lewis Radcliffe, director of the Oyster Institute of North America, this is a sweeping decision that is expected to govern for years, and should greatly strengthen the fisheries' position in its dealing with wage-hour and other governmental activities.

PRICE SUPPORT— Hostility toward a proposal by Senator Morse of Oregon for Federal price supports on fish products has been shown by leaders in the West Coast salmon and tuna fishing and packing industry. Morse offered an amendment to the agriculture bill just before Congress adjourned. The amendment, which died without being acted upon, would have provided a price support of 90 per cent of parity for fish and shellfish products.

The fishing industry leaders said they will resist any attempt at the next session of Congress to put fish under price controls. They said Morse's proposal was the first major attempt to support the price of fish with Federal aid, as has been done with agricultural products.

Spokesmen for the industry said there is a general feeling that price supports for the American fish market would bring "government interference and regulation." One major packer said experience has shown that price supports mean more and more Federal regulations until all freedom of operation is lost.

MARKING OF WRECKS— The owner of any vessel which becomes wrecked or sunk, accidentally or otherwise, in the navigable waters of the United States is required by law to mark immediately such obstruction with a buoy or daybeacon by day and a light at night until it has been removed or abandoned, according to the U. S. Coast Guard Bulletin of October 1949.

Furthermore, the owner is required to report the name and accurate location of the wreck, depth of water over it, and the location and description of marking established or proposed. This report is made to the nearest Officer in Charge, Marine Inspection, U. S. Coast Guard.

In the event the owner fails to take action and the Coast Guard must mark the wreck for the protection of navigation, or replace nonsuitable markings, the owner is liable for the cost of placing, maintaining and removing the markers.

Legal abandonment of a sunken wreck is the complete re-

(Continued on page 53)

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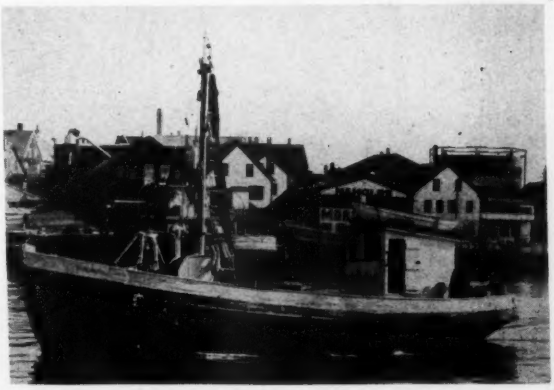

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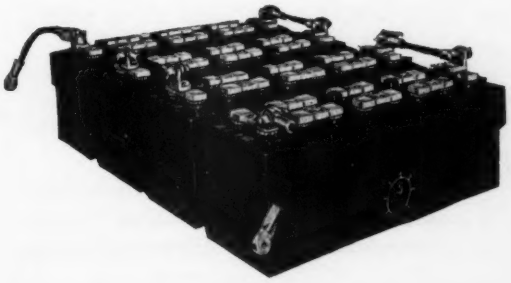

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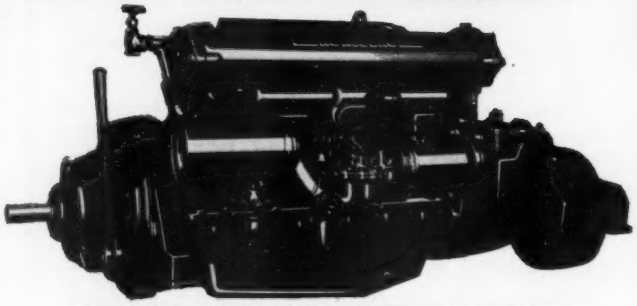
Here, again, is further proof of the increasing popularity of Nordberg Gasoline Engines among commercial fishermen from coast to coast.



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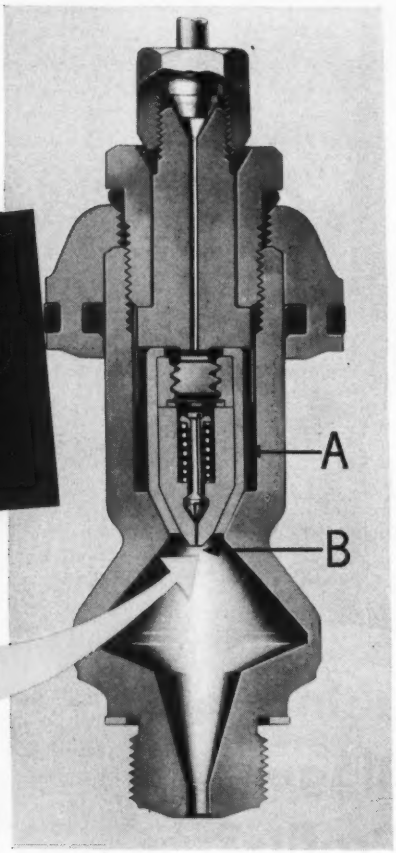

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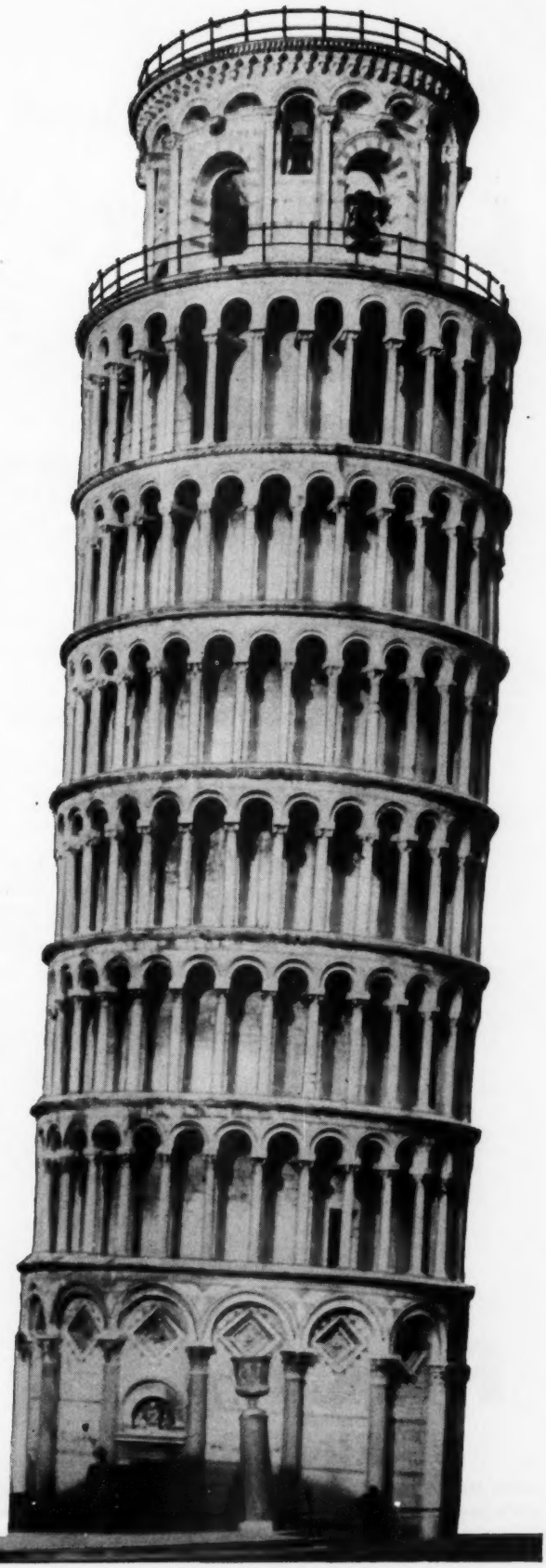

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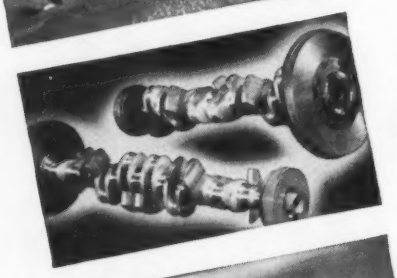

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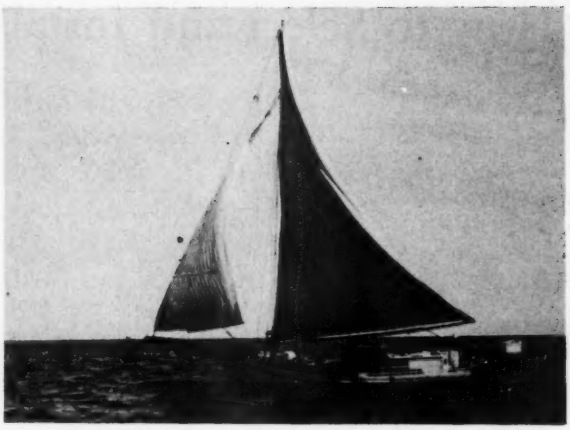
Oysters growing in bunches in North Carolina waters.



A sloop rigged oyster dredge in operation in No. Carolina.

Oyster Industry of North Carolina

Its Problems of Rehabilitation and Development*

MANY factors appear to favor North Carolina as an oyster-producing area. There is an abundance of seed in some areas. Potentialities exist in Core and Bogue Sounds for greater utilization and development of oyster seed. The quality of oysters is, in general, good and can compare favorably with oysters from other areas. The fact that North Carolina oysters have since 1890 been sold as Chesapeake oysters cannot be overlooked. North Carolina is situated about in the geographical center of the extreme ranges of the Eastern oyster. Weather conditions favor rapid growth, making it possible, in some localities, to produce a marketable oyster in two years. The number of enemies are not as great as in other oyster-producing areas.

According to the available statistics, North Carolina has maintained a rather modest position in oyster production over the past 50 years. In 1940, for example, it was third or fourth from the bottom of the list of oyster-producing States along the Atlantic and Gulf Coasts. Since 1930, production has only twice exceeded 500,000 bu. in a single season. At least four surveys have been made of North Carolina waters concerning the possibilities of oyster culture (Winslow, 1886; Grave, 1904; Coker, 1907; Galtsoff and Seiwell, 1928). Each survey appears to express the opinion that potentialities exist for a great industry.

However, the industry has been slow to develop, and the oyster continues to represent one of the great undeveloped natural resources of the State. The Institute of Fisheries Research is acting in an advisory capacity to the North Carolina Department of Conservation and Development in the rehabilitation and development of the industry.

Oyster Producing Areas

The oyster-producing areas are located in the numerous sounds of the State, bound on the ocean side by the so-called banks, making these sounds almost landlocked bodies of water. Albemarle and Currituck Sounds are considered too fresh for oysters. Oysters are found growing from Roanoke Island to the South Carolina border. Pamlico Sound produces the bulk of the oysters marketed in the State. This is not surprising when we consider that this body of water, with approximately 1,100,000 acres, is seven times greater than Roanoke, Croatan, Bogue and Core Sounds combined.

Pamlico Sound, some 70 miles long by 30 miles wide at its greatest length and breadth, is a relatively shallow body of water averaging 18′ in depth, with the greatest depth at 25′. Several shoals extend from the mainland into the Sound. Brant Island Shoal with a depth of 2 to 8′ extends in a northwest-southeast direction about half way across the Sound. Bluff Shoal extends in a north-south direction from the northern shore of Pamlico Sound with a depth of 7 to 11′ overlying the shoal. It merges into Royal Shoal which extends to Ocracoke Inlet.

The bottom of Pamlico Sound varies from mud to hard sand with the mud bottom confined chiefly to the channels of the various tributaries. The salinity in the immediate vicinity of the inlets averages about 30 parts per 1000, progressively diminishing toward the mouths of the Pamlico and Neuse Rivers on the western side of the Sound. The currents are determined largely by the winds, and tidal fluctuations are found in the vicinity of the inlets.

A schooner rigged oyster boat leaving dock at a North Carolina port.

Winslow (1886) estimated 10,000 acres of natural beds for the State with 7,700 acres located in Pamlico Sound. Ten years after Winslow's survey, extensive beds were discovered in Pamlico Sound about two miles off shore in deeper water. Grave (1904) states that some beds surveyed by Winslow in Hyde County had increased in area due to the extensive dredging and estimated the natural beds in this County from 18,000 to 36,000 acres in 1900. No recent surveys have been made, but many of the areas surveyed by Winslow were found this past year to be productive. Occasional reports are received from the shrimp trawlers that beds are located in the lower southeast Pamlico Sound area. A survey of this area is planned in the near future.

Present Industry

The oyster industry of North Carolina became of importance in 1889 when decreased oyster production in the Chesapeake region led to the establishment of branch houses in the coastal

(Continued on page 38)

* This article is taken from a paper presented at the recent Oyster Convention by Dr. A. F. Chestnut, Institute of Fisheries Research, Morehead City, N. C.

How to Select and Install Propeller Shafts

W. Melvin Crook* Analyzes Propeller Stress and Cites Need For Proper Size, Machining, Fitting and Bearing Spacing

MOST of us underestimate the job our propeller shaft has to do. The reliability of modern shafting lulls us into thinking that the shaft just tails along peacefully spinning in the wake of our boat. Actually, the poor propeller shaft is beset by a myriad of stresses during the course of normal operation.

In the first place, there is the torque or rotating effort which the shaft transmits from the engine to the propeller. This force should have the same effect on the shaft as we could produce if we held the propeller end of the shaft in a vise and then attempted to twist the engine end of the shaft with a pipe wrench.

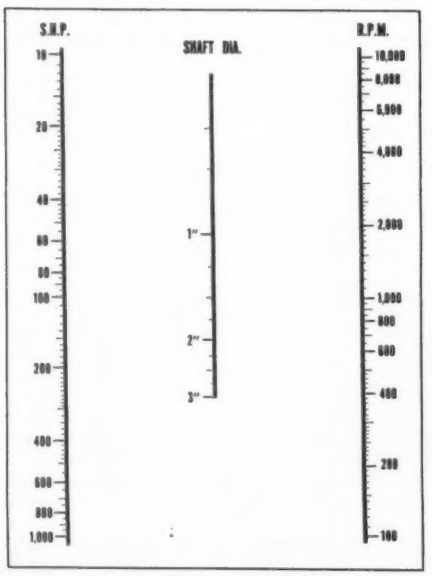
Unfortunately, however, the engine does not deliver a constant and continuous pull such as you would impose with a wrench. An engine is made up of one or more cylinders and produces power in the form of an impulse as each cylinder fires. Flywheels tend to even out these impulses and special vibration dampers built into some engines have helped further to nullify the surging. Still you must think of the twisting of the shaft as being more like that you would get from pounding the handle of our imaginary wrench with a riveting gun than that of any steady human pull.

Just to make things even tougher for the shaft, the propeller does not impose a constant load equivalent to having the end clamped in a vise. Every time a propeller blade passes immediately behind the strut or the deadwood, it leaves comparatively solid water and enters an area of broken water and low pressure. This allows the blade to whip ahead momentarily, only to be brought up short as it strikes solid water beyond. So we see that propeller load is also a surging thing, being somewhat like having a riveting gun beating the vise in a direction opposite to the one pounding the wrench on the "engine" end.

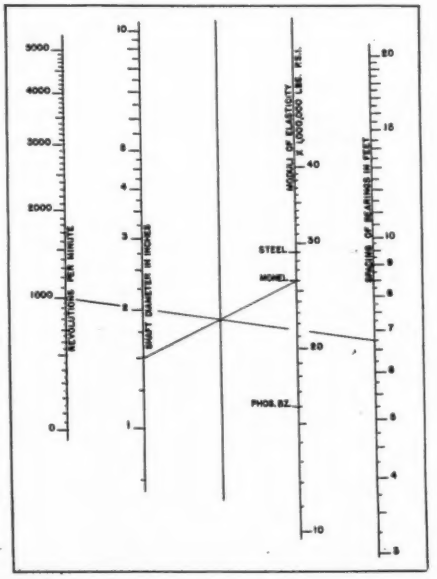
Even as your shaft is absorbing this torque, it is also carrying the thrust or forward-driving power from the propeller to the thrust bearing (which is usually built into aft end of the engine). This thrust could be portrayed by pushing forward against the propeller end of the shaft with a powerful bulldozer while the boat is lying solidly in its storage cradle. For instance, a boat being propelled at 12 miles an hour by a 110 hp. engine is absorbing almost one ton of thrust through its propeller shaft.

Still another type of load placed on your shaft under normal conditions arises from the bending and twisting which takes place in any hull while under way. Particularly in a heavy sea, hulls go out of their designed shapes a startling amount. As the hull deforms, the shaft is compelled to warp itself to the new line assumed by the displaced engine, stuffing box and struts.

In addition to the qualities of strength and rigidity necessary to perform under the combination of torque, thrust and deflection, your shaft material must be hard enough to endure countless revolutions of rubbing inside the stuffing box and strut bushings—usually with water as the only lubricant. Fortunately, many craft are nowadays equipped with shaft bearings made of rubber, certain types of hard wood or other special material which has but slight abrasive effect on the shaft. However, a large proportion of us are still running with metal shaft bearings. All of us count on our shafts to take the rubbing set up between the bearing and shaft metal without undue wear even though we are turning present-day shafts as high as 8000 rpm.



Left: Chart 1, for determining shaft diameter. Lay down a ruler to connect your horsepower on the left with your propeller rpm. on the right. Draw the line. The point where it intersects the center line shows the size of Monel shaft to use.



Right: Chart 2, for determining spacing of bearings. Rule a line from shaft size in second line scale to modulus in fourth scale (26 for Monel). Then rule a line from point of intersection on center scale to connect propeller rpm. on left scale and extend the line to right scale.

Every seafaring man realizes that a shaft must be corrosion-resistant. Unfortunately, this requirement has been too often interpreted to mean merely non-rusting, so familiar are the detrimental effects of rust. Yet, there are forms of decomposition which are much less obvious than rust—in fact some of them might pass unnoticed by anyone but a trained metallurgist.

One of the least widely understood of all the forms of decomposition is galvanic corrosion or electrolysis. Simply stated, electrolysis is a process which takes place when two dissimilar metals are in contact under salt water. The result of this process is that one of the metals is eaten away.

This galvanic corrosion can take place when all three of the following conditions prevail: (1) The metals are dissimilar. (2) The dissimilar metals are immersed in salt water. (3) The dissimilar metals, immersed in salt water, are connected through a metallic path.

It has been found from practical experience that metals

(Continued on page 30)

* Motor boat racer, author and engineering authority on boat maintenance.

Newfoundland Fisheries

Have the Second Largest Per Capita Production In the World

IN April of this year, Newfoundland became Canada's tenth province and thereby added new significance to the status of the Canadian fishing industry in the national economy. The Newfoundland fisheries are widely known and they are, at present, the outstanding industry of the island.

With the Grand Banks, the world's greatest fishing grounds, lying just off the island's doorstep like a big door mat, it is natural that Newfoundlanders turn first to the sea. There are about 28,000 fishermen out of a total population of 325,000 people. The importance of the fisheries can be clearly emphasized by the fact that the yearly catch of fish amounts to more than 1,700 lbs. per capita, which is surpassed by only one country in the world, namely Iceland.

The Industry

In the big island, ancient fishing methods, used by the first men who sailed across the ocean and settled in the jagged little inlets of the island, and the most modern methods in gleaming, steel-equipped filleting plants are cheek-by-jowl. In many places, the fish must be "pitched" up the sheer coastal cliffs by means of a series of "fish stages", built for the purpose. Both fishing by hand line (cod "jigging") and fishing by cod traps are methods used by Newfoundlanders in their Atlantic harvest. A fisherman goes down to the sea with the gear his father had before him, and his father before that. A fisherman may also go down to the sea with a thousand-dollar engine, the finest in the land, beating and pulsing under the unpainted boards of his fishing skiff.

He squints at the sun and the wind and the tide with certain, instinctive knowledge that cannot be gauged by compass, and he lines up his course with a high tree on a bluff or the point of the next cove. He knows with the keenest of keen minds what he should be selling his fish for, what the current world situation will do to his livelihood, and he feels now, as part of Canada, that he will get a better price for his catch.

Newfoundland's fishing industry is pure gain for Canada. Fish caught off Newfoundland shores are dressed, filleted and quick frozen right on the big island, in some of the most modern and up-to-date plants in North America. Refrigeration plants are scattered from the Avalon Peninsula in the south to the Straits of Belle Isle, and refrigeration ships, shuttling back and forth to Sydney, Nova Scotia, carry the processed fish to the mainland. From there, it goes mainly to United States markets such as Cleveland, Chicago and Cincinnati, while fresh salmon, packed in ice, is distributed through Canada a few hours after being taken from the water and while the fish still "have a flip

Boats drawn up at Pouch Cove, Nfld. At right are the stages up which fish are pitched by hand.

to their tails," as the Newfoundlanders say. The cod livers go into vats to produce the by-product of the cod fisheries, the commercial cod liver oil.

Dried salt cod is the main product of the island's fisheries, and nothing could be more ingenious than the use of the fish "flakes" which stand like frail platforms on slim, spindly legs—looking as if the first light breeze would blow them away. On these, split and cleaned, the cod lie in the sun to dry in the small outport villages. Although Winter lashes in at the "flakes", they are rarely destroyed, and next Spring finds them sturdy as ever, for all their flimsy appearance, clinging tenaciously to the rocks.

Catch

The catch of fish in Newfoundland in 1948 amounted to about 520 million pounds, while the total Canadian landings reached 1,370 million pounds. Thus the addition of the Newfoundland fisheries to the former Canadian will mean in the future a yearly crop fluctuating between 1.8 to 2.0 billion pounds. The landings of the island will increase the volume of the rest of Canada by about 40%, and those of the east coast alone by about 75%.

The marketed value in 1948 of the fishery products of the new Province was about $30 million. Marketed value of the Canadian fisheries for that year are estimated to have been about $145 million, of which $60 million was accounted for by the east coast—the Maritime Provinces and Quebec. Thus, in value terms, the fisheries of Canada will be increased by 20 to 25% (taking into account the values of years previous to 1948), and those of the east coast by about 50%.

It will be noted that the percentage increase of Canadian fisheries in terms of quantity is higher than that in terms of value. This is due to the fact that 80% of the landings in New-

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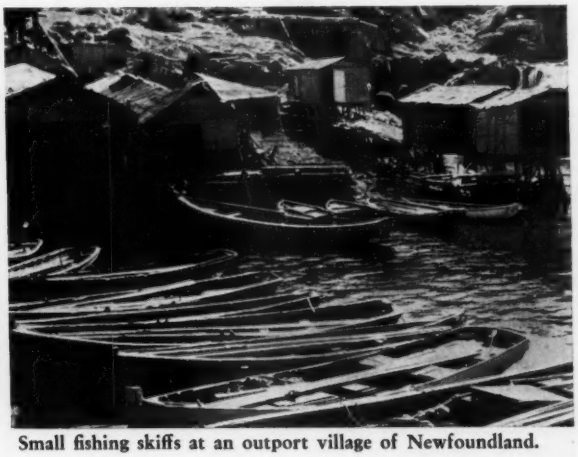
Newfoundland fishermen hauling their net.



Small fishing skiffs at an outport village of Newfoundland.

The new 64′ snapper schooner "Mary S." owned by Spence Bros. of Niceville, Fla.

Florida State University Plans New Marine Laboratory

The establishment of a marine biological laboratory to be directed and administered by Florida State University has been planned, Florida University officials report.

The first building of the laboratory will be on the Gulf coast south of Tallahassee. It will have three main purposes: to offer training of marine biologists; provide first class facilities for all qualified scientists who wish to do research or oceanography; and provide trained research workers and facilities for the investigation of fishery problems and the possible development of additional marine resources throughout the State.

In its work on fisheries problems, the laboratory will cooperate closely with the State Board of Conservation, of which George Vathis is supervisor. It will also work in conjunction with the laboratories and field stations of the Fish and Wildlife Service at Pensacola; St. Mark's Light and Sarasota; and with other marine and inland laboratories of Florida and other southern States.

Dr. Harold J. Humm, who heads Florida State University's marine biology department, has been connected with Duke University Marine Laboratory since 1942. He has done considerable research on agar possibilities of the Atlantic Coast and just recently conducted a survey of economic seaweeds of Newfoundland for the Industrial Development Board. He plans to continue research of Florida seaweeds concentrating on the distribution of marine algae on the Gulf Coast and the significance of various physiological groups of marine bacteria.

Catch Valued at Over $35,000,000

The research division of the Florida State Chamber of Commerce reported Oct. 16 in its business review bulletin that the State's total 1948 seafood catch was valued at the docks at $35,225,134.

Main items comprising the total were shrimp, $8,487,000; mullet, $7,134,000; blue crab, $6,335,000; mackerel, $2,115,000; snapper, $1,494,000; sea trout, $1,348,000; grouper, $1,042,000; Florida lobster, $1,018,000; oysters, $533,000; pompano, $496,000; and cat fish, $429,000. The menhaden catch sold for $1,758,000, and shark for $450,000. Sponges were valued at $932,000.

A comparison of last year's catch, in quantities rather than in dollars, with the average for the years 1943 through 1947, showed that the shrimp catch was up about 5,000,000 lbs. from the average, blue crab was more by 4,000,000 lbs., and sea trout by 1,000,000 lbs. The menhaden catch, which usually varies from year to year, was 12,000,000 lbs. more last year than the five-year average.

The mullet catch in 1948 was less than the average by 4,000,000 lbs. and was 20,000,000 lbs. under the catch in 1943. Last year's mackerel haul was less than during any one of the five years and off 4,000,000 lbs. from the average. Grouper was down 1,000,000 lbs., and the oyster take was only a fraction of what it was 10 years ago.

New Snapper Boat "Mary S."

One of the recent additions to the Florida snapper fleet is the new 64′ x 19′ x 8′ schooner *Mary S.*, owned by Spence Bros. of Niceville, Fla. She was designed and built by Lum Thompson and is skippered by Capt. Harvey Fidler of Panama City.

The boat has a fish hold capacity of 40,000 lbs. and sleeps 4 men in the fo'c's'le, 6 in the after cabin and one in the pilot house. Power is furnished by a 165 hp. General Motors Diesel with Twin Disc reduction gear, which gives a speed of 9 knots. The engine swings a 48 x 34 Columbian propeller on a 3″ Monel shaft.

The *Mary S.* is equipped with 32-volt Surrette batteries and a 1½ hp. Onan auxiliary engine. She has a Kelvin-White compass, RCA radiotelephone and direction finder, is painted with Pettit paint and uses Plymouth rope and Esso fuel and lubricating oils.

Could Increase Oyster Yield

Several Florida oyster growing areas could increase their yield more than 100% by "relatively simple means of cultivation," the State Board of Conservation said on October 4.

They listed among the areas Cedar Key, Crystal River, Spring Creek, and St. Mark's. The Apalachicola area leads the State in oyster production at present.

The Board disclosed that Florida oysters can grow 3″ in less than a year, while it takes oysters raised farther north three or four years to attain that size.

The Board began a Statewide survey on October 10 to determine which Florida waters would produce the "fattest" oysters. The Oyster Cultivation Division of the Board will concentrate its work on those areas best suited for production.

Large Shrimp Fleet Expected at Fort Pierce

Fort Pierce is expected to have a shrimp fleet of 60 to 70 boats this season, according to Harry J. Kicliter who will serve as agent for the fleet operators. At least eight operators from Fernandina, with 35 to 40 boats, and six to eight from St. Augustine, with 25 to 30 boats, will base at Fort Pierce during the season, Kicliter said.

Kicliter will handle the heading and packing of the shrimp, and also the shipping as ordered by the operators. The season was expected to be well under way by the first of November and usually lasts through February.

Value of Scientific Analysis

Florida needs a stronger, better organized and particularly a well-financed Board of Conservation with power to enact regulations on a basis of scientifically-determined facts, and without being under any politically-biased control of either sportsmen or commercial fishermen, according to Dr. F. G. Walton Smith, head of the marine laboratory at the University of Miami.

"Until a year ago," he said recently, "there were no experts engaged in analyzing Florida's fishing industry. Consequently, the laws are conflicting, confusing and in many cases inadequate.

"For instance, we've found that mullet don't begin to breed until they are 10″ long, and we are now continuing studies to determine just how old a 10″ mullet is. We've also found that mullet breed in offshore waters, contrary to general belief.

"Consequently, it would be foolish to protect breeding of mullet in brackish, inshore waters. There is a shortage of mullet because in some parts of the State mullet can be taken long before they have an opportunity to breed."

Referring to oysters, Dr. Smith said: "There is a shortage of oysters because the beds have been neglected, mismanaged, and even in some cases destroyed partly by failure to replace shell, overfishing or allowing the beds to silt-over. But the new oyster division of the Board of Conservation is now actively engaged in re-establishing Florida's oyster industry."

Apalachicola Bay Oyster Area Opened

The State Board of Health said Oct. 16 a small area in Apalachicola Bay had been opened to oystering. The area extends a mile into the Bay and two miles along the shore south of Gorrie Bridge.

Gunn Secretary-Treasurer Gulf Commission

William Dudley Gunn of Sarasota was appointed secretary-treasurer of the Gulf States Marine Fisheries Commission at a meeting of that body in Houston, Texas, the middle of October.

New Dragger "C. R. & M." Is Largest at Provincetown

PROVINCETOWN'S newest fishing dragger, the 65' *C. R. & M.*, built for Capt. Ferdinand (Fred) Salvador of Provincetown, Mass., by Grandville Davis of Davis Boat Yard, McKinley, Maine, began fishing out of that port early last month. She landed trips at New Bedford on October 24 and 31.

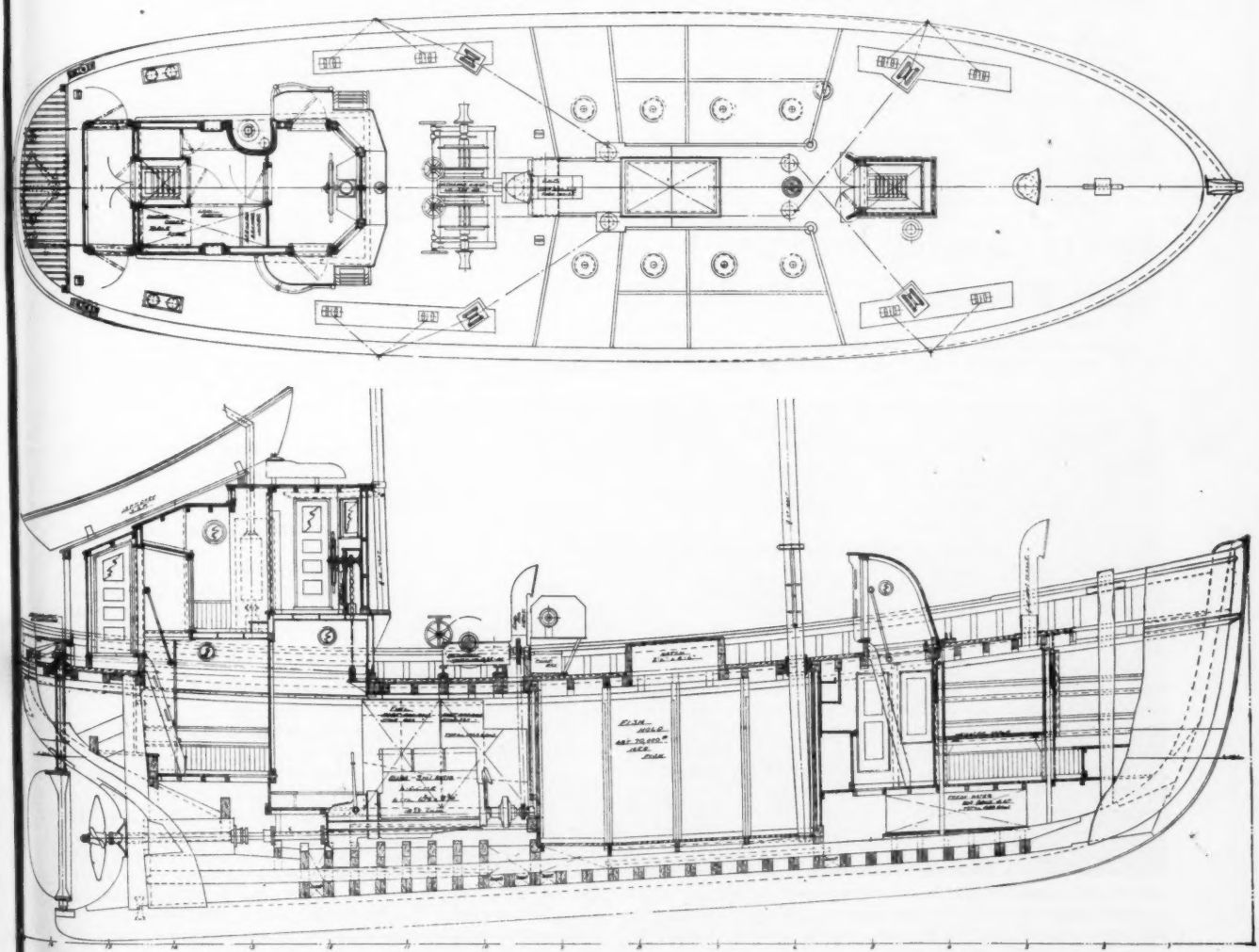
Capt. Salvador, who formerly skippered the dragger *Shirley and Roland*, now has the largest and most powerful dragger in the harbor, and carries six crew members, besides himself. The boat was designed by Albert E. Condon and can ice down 70,000 lbs. of fish. She has an 18' beam, 9' 8" draft and tonnage of 57 gross and 21 net. There are 6 bunks forward, 2 aft and 1 in the pilot house.

Of extra heavy construction, the dragger was built with 2" x 5" double laminated oak frames, 10" x 32" keel, and 5½" x 6" deck beams. She is planked with 2" long leaf yellow pine and decked with 2½" cedar. Her pilot house, placed on a steel trunk, has 1⅛" matched cedar sheathing outside and cypress finish on the inside. Her scantlings compare with those usually found on an 85-foot vessel.

The new boat, whose name comprises the first initials of the skipper's children, is powered by an 8-cylinder Model 2505, 230 hp., 900 rpm. Buda Diesel with 2:1 Western hydraulic reduction gear and Twin Disc front end power take-off for winch drive. Turning a 54" by 32", three bladed Columbian Monel

(Continued on page 46)

The new 65' dragger "C.R.&M." owned by Capt. Ferdinand Salvador of Provincetown, Mass. (inset) and built by Davis Boat Yard, McKinley, Maine.



Deck arrangement and inboard profile plans of 65' dragger "C.R.&M." designed by Albert E. Condon.

New-Type Trawl Catches Fish in Any Depth

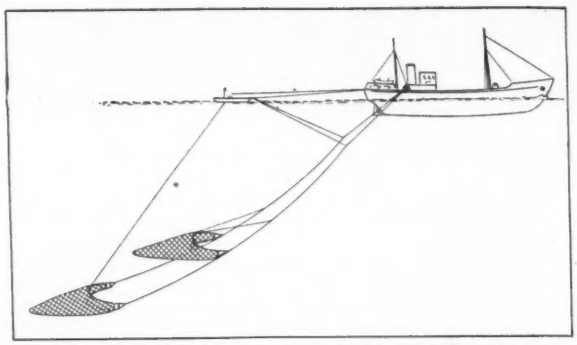
A new-type fishing trawl, similar in certain respects to the Danish floating trawl, has been invented by Friedrich K. Schatz of Tanganyika, British East Africa. The new gear consists of a dragnet, very similar to the customary trawl, which will catch fish in any depth, i.e., 10, 20, or 50 yards below the surface, or close to the bottom.

The heavy wooden otter boards of the trawls are dispensed with, as is the third board above the top line which serves to keep the net wide open. In this way the resistance caused by these boards is eliminated and a considerably faster pull is accomplished, saving power, and eliminating some of the wear and tear upon the net, according to the inventor.

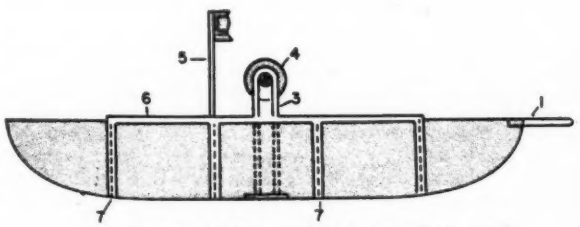
As only the resistance of the net in the water has to be overcome, the net can be drawn by the power of a relatively small motor. Nets can be fished on both sides at the same time, and discharged first on port and then on starboard, as long as the catches are worth it. It is even possible to use several nets below each other so that a greater depth and area can be covered with one drag, depending on the power of the motor.

The construction consists of a float drawn by a vessel in such a manner that the net will be dragged through the school of fish. Height and depth adjustment of the net is done over the float by a device on board the vessel. As speedily as the net can be dropped, the float will be put into operation, because the manipulation is quite easy and does not interfere with the operation of casting and hauling the net.

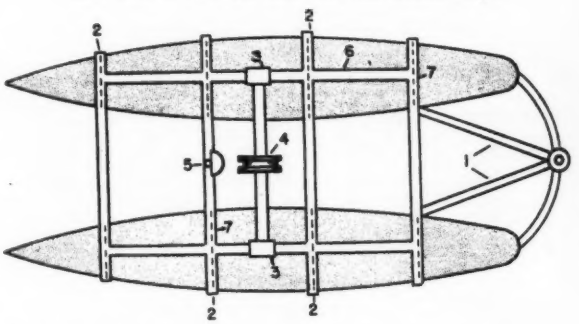
The inventor claims that this new trawl will catch fish that will not get into a drift net; the vessel can keep near a school of fish until it has been cleaned up; mackerel fishing in the North Atlantic will be simplified; schools of fish can be caught which could not be reached formerly because of the great depths in which they are found; and fishing in heavy weather is made possible.



The Schatz trawl showing two nets rigged one below the other to cover a wider area. To the left of the vessel is the float.



Side view of the float used with the Schatz trawl.



Top view of the Schatz float showing: (1) towing bar. (2) stability horizontal bands for floats. (3) roller trestle. (4) roller. (5) position pole. (6) vertical bars. (7) walls of float.

Battery Charging Requires Safety Precautions

Reports of accidents involving the explosion of gases given off by storage batteries aboard ship indicate the need for exercising care in charging storage batteries.

The gases issuing from a charging battery are a mixture of hydrogen and oxygen and will explode with great violence and spraying of acid if a spark or flame is brought too near them. The gases are not dangerous when diluted sufficiently with air but a room or compartment in which charging batteries are confined should be ventilated. Four percent hydrogen in the atmosphere is said to be dangerous. Do not bring a flame or sparks near vent openings until gases have been cleared from cells by blowing air into them gently.

When restrictive self-leveling devices are used in the vent openings and the liquid is at "full" level withdraw (temporarily) enough electrolyte so that the hydrogen gas trapped in the cell can be blown out with a gentle stream of air.

Due to the presence of impurities in all battery cells small quantities of hydrogen gas are given off at the negative plates even when the cells are not being charged. It must be assumed therefore that hydrogen gas may be present within the cells at all times. A torch, match flame, lighted cigarette or sparks from metal tools accidentally laid across the terminals might cause ignition of hydrogen. To avoid sparks do not disturb connections between batteries while charging—throw switch "Off" at charger first.

If for any reason acid electrolyte should be spattered in the eyes, wash it out immediately with copious quantities of clean, cold water cupped in the hands and seek medical aid.

If you recharge or handle batteries, the following safety precautions compiled by the Merchant Marine Council of the U.S. Coast Guard should be observed:

1. Venting of charging compartments must be complete.
2. Battery caps should be tightly screwed in place whenever the leads are connected or disconnected.
3. Never connect or disconnect leads with power being supplied to or released by the battery.
4. Use battery-servicing equipment to avoid splashing or spilling of acid.
5. Never attempt to blow off loose particles or corrosion on the top of a battery by mouth or air hose. A brush should be used. Brush away from you and keep your face as far away as possible.
6. Do not wear rings while servicing a battery as severe burns may result.
7. Keep lighted matches, cigars, cigarettes, and all open flames away from batteries.
8. Keep hands away from face while servicing battery and wash thoroughly when through.
9. Use battery tongs or other appropriate carrying devices when removing or lifting batteries.
10. Follow manufacturer's instructions when operating battery recharging equipment.
11. Acid—Battery electrolyte must be handled with great care as it will blister the skin and damage clothing. It is advisable to wear goggles, rubber gloves, and a protective apron when working with it. Neutralize acid electrolyte spilled on clothing with diluted ammonia water or a water solution of baking soda. If acid solution above 1.835 gravity gets on clothes dilute it with clean water first and then neutralize.

F. J. O'Hara's New Ice Plant Opened at Rockland, Me.

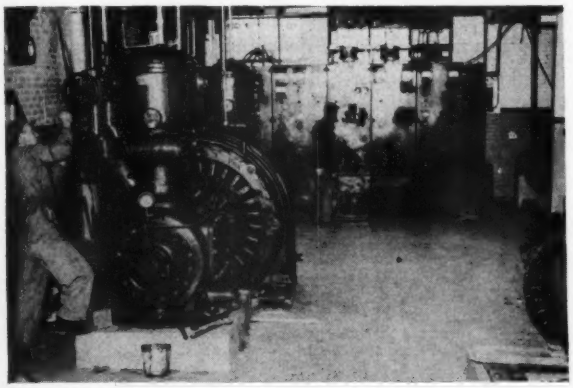
OVER 300 persons attended the official opening of the F. J. O'Hara & Sons, Inc., new ice plant at Rockland, Maine on October 23. The guests included members of the fishing industry and allied trades from Maine, Boston and New York.

A supper was served in the engine room of the plant and an elaborate floor show, featuring several well known entertainers, was staged in the tank room. On display were cakes of crystal ice in which had been frozen flowers, lobsters and fish.

Francis J. O'Hara, president of the Company, extended special greetings and told how he first traveled to Rockland 52 years ago to buy lobsters and scallops for his father who operated a large seafood business on T Wharf in Boston.

In addition to inspecting the ice plant, the visitors were escorted through "Journey's End", a unique waterfront home which will serve as living quarters for Mr. O'Hara when business keeps him in Rockland. The new home, nautically decorated and furnished by Mrs. O'Hara, was made from a building formerly located on the site of the new ice plant, where it was used by the Waves during the War.

Left to right, Mrs. Francis J. O'Hara, Mr. O'Hara, president of F. J. O'Hara & Sons, Inc., and Rockland City Council chairman Osgood A. Gilbert at opening of O'Hara ice plant.



Frick refrigeration compressor and switchboard in the engine room of the new F. J. O'Hara Rockland ice plant.

Conveniently located on Tillson Avenue, a short distance from O'Hara's wharf, the new ice plant is approximately 80′ x 150′ and of concrete and cement block construction. It has a maximum output of 120 tons of ice per day and 450 tons' storage capacity.

The ice making room has 1200 freezing cans which will produce a total of 200 tons. Actual freezing time is about 30 hours and normally 100 tons are taken out of the cans each day. Thirteen cans, holding a total of 2 tons of ice, are pulled at one time by a traveling power-driven crane. It is customary to remove every other row of cans in order to maintain proper cooling conditions.

After the cans are pulled, the crane lowers them into a dip tank for loosening the ice, this tank being fed by the slightly warmed water from the compressor discharge. Next the cans are dropped on a balanced ice dump which revolves and allows the ice to slide out on to a conveyor. The cakes then are carried into the storage room where they are piled with a portable ice stacker.

All water used in making ice at the O'Hara plant is filtered, thus assuring a purified product. As well as making regular artificial ice, the Company produces crystal clear ice by means of special agitating equipment, which draws air out of the water through tubes inserted in the ice cans.

The Frick refrigeration machinery in the new plant consists of two 10 x 10 compressors set in tandem and driven by a 200 hp. synchronous motor, a single 10 x 10 unit driven by a 100 hp. motor and a 7 x 7 machine with 60 hp. motor which can be used for standby service. There are two exciters and the equipment operates on a 2300-volt system.

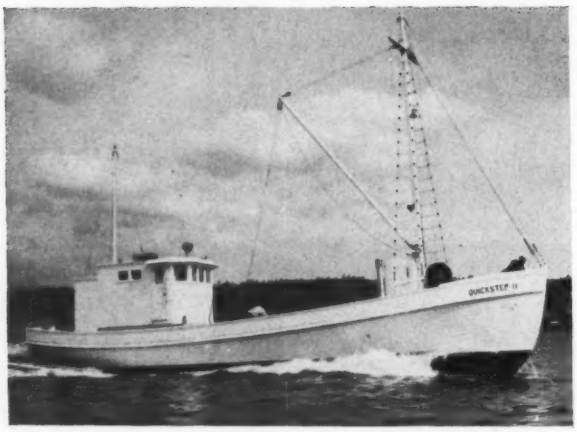
The new ice plant, the largest serving fishermen in Maine, is expected to be a great aid in stimulating the growth of the fishing industry. It will make possible an adequate year round supply of ice regardless of weather conditions.

In addition to the new plant, O'Hara has ice making facilities in the main freezing plant at Rockland, which can turn out 35 tons per day and which has a 50-ton ice storage capacity.

In line with its policy of keeping its plants up-to-date, the O'Hara Company has started a remodeling program at its Rockland fish filleting and packing plant. A feature of the work will be the installation of a new under-floor waste conveyor system through which the fillet waste will be sluiced with water from the overflow of the freezer refrigerating machinery.

The Company also maintains fish plants at Boston Fish Pier and Portland and operates an affiliated concern, Frank R. Neal Co. at Eastport, Me. Two of O'Hara's 58′ draggers, the *Trinity*, Capt. Al Lowell, and *Queen of Peace*, now are fishing out of the Eastport plant. Other boats owned by the Company are the 82′ draggers *Villanova*, Capt. John Libro; *Jeanne D'Arc*, Capt. William Johnson; and *Notre Dame*, which are to be repowered shortly, and the 90′ *Araho*, Capt. Reuben Doughty.

Aerial view of F. J. O'Hara & Sons' facilities at Rockland, Me. At lower right is fish packing plant, to which is connected the freezing plant. The new ice plant is at extreme upper left and the "Journey's End" living quarters are on dock at left beyond the quonset type structures.



The 55′ sardine carrier "Quickstep II" owned by Capt. Norman Bickford of Camden, Me. Built by Bristol Yacht Building Co., So. Bristol, Me., early this year, the vessel is powered by a 165 hp. General Motors Diesel.

Maine Has Good Fall Run Of Sardine Herring

Following a heavy run of herring which started in September, Maine's sardine plants operated at capacity during a good part of last month. By October 15, the total pack for the season had jumped to 2,400,000 cases, which, however, still was substantially behind last year's output of 3,065,000 cases to the same date.

While some plants may pack until December 15, many of them were planning to shut down for the season early this month, and there is little possibility that this year's production will come up to last season's total of 3,300,000 cases.

The catch was fair last Spring but spotty during the Summer. Maine waters were filled with pogies, and some claimed that these fish were eating the herring, while others maintained the herring would not come into the bays as long as the pogies were present.

The biggest catch of herring taken this year was brought ashore at New Harbor October 13 by Capt. Samuel Morton, master of a 40′ seiner, who dumped 10,000 bushels into Round Pond until a packing company could take them. The fish were taken off Bristol. Herring have been selling for $1.14 a bushel.

European Oysters Planted

Experimental planting of European oysters in three carefully selected locations along the Maine coast has been announced by Sea and Shore Fisheries shellfish specialist Dana Wallace. Wallace said that the project was being carried on in cooperation with U. S. Fish & Wildlife experts to determine if the species could be successfully propagated in Maine waters.

The experimental stock, consisting of oysters of various sizes and ages, was obtained in Holland and brought to this country under the direction of Federal oyster expert Dr. V. L. Loosanoff. One half of the shipment is being introduced in Long Island Sound waters, while the remainder was turned over to Maine, where plantings were made in Basin Cove, Harpswell; Taunton River, Franklin; and at Boothbay Harbor.

The oysters were submerged on specially built wire trays, and must first pass the rigid test of survival during the Winter months. If this is successful, efforts to get a natural set of seed stock will be made next Spring and Summer.

Sea and Shore Fisheries to Test Clams

Transfer of responsibility for testing clam areas from the Department of Agriculture to the Department of Sea and Shore Fisheries has been effected, and machinery for the revamped program is ready to go into operation. The action was taken as the result of legislation which set up a $25,000 two-year fund for a continuous survey of the more than 50 closed clam areas along the coast.

Although his men will make the tests and compile results, Sea and Shore Fisheries Commissioner Richard E. Reed said that the final decision of openings and closures would still rest with Agriculture. The figures will be submitted to that agency which will determine the status of various areas and whether or not they conform with standards set up by the United States Public Health Service. Headquarters for the work will be at the Department's research and experimental station at Boothbay Harbor.

Year-Round Lobster Measuring Program

Inauguration of a coastwide all-year lobster measuring program has been announced by the Department of Sea and Shore Fisheries, and field work will be done by the Department's 25-man warden force, assisted by research personnel. The purpose of the program is to obtain essential data on the size composition of the commercial catch and, together with the Department's lobster tagging program, information on lobster migrations, growth and mortality rates, population and fishing intensity. Measurement of about 100,000 representative samples of the commercial catch will be made.

Clyde Taylor, chief biologist of the Sea and Shore Fisheries Department, has been appointed to assume the additional duties of superintendent of the Department's lobster rearing and research station at Boothbay Harbor. He succeeds Merlin Gray of Boothbay Harbor, who recently resigned.

Gillnetter "Mary S." Rammed and Sunk

The 92′ dragger *Vandal*, owned by the Harris Co., Portland, rammed and sunk the 63′ gillnetter *Mary S.* Oct. 13, two miles north, northeast of the Portland Lightship. The six-man crew on the *Vandal*, including Capt. Jens S. Buhelt of Portland, took aboard Capt. Stephen Minervino of Portland and the three crew members of the *Mary S.*, owned by R. W. Hanscom, Inc., Portland. The *Mary S.* was outbound for Jeffries Ledge at the time of the collision.

The *Vandal*, en route from the Bay of Fundy to Portland with 90,000 lbs. of fish, was damaged about her stem.

"Althea" Purchased by Ward's Sea Foods

The 70′ Virginia dragger *Althea*, which has been fishing out of Portland, has been purchased by Ward's Sea Foods, Inc., Portland, from Capt. J. Lawson of Newport News, Va. Capt. Ray F. Stoddard, veteran Portland fisherman, will be skipper of the dragger, and four local fishermen will serve as her crew. The three-year-old vessel was built at Hampton Roads, Va., and has a carrying capacity of 90,000 lbs.

Two other Virginia draggers owned by Capt. Lawson, the *Resolute* and *Lawson*, recently returned to their home ports after fishing out of Portland for several months.

New Coast Guard Rescue Plan

A number of Portland fishing industry leaders pledged support recently to a Coast Guard suggestion that fishermen keep the South Portland base informed of their trip plans before leaving port, in order to enable the Coast Guard to reach disabled fishermen more quickly. Under the plan, the base would have immediately at hand the departure and arrival times of the boats, names of the fishermen aboard and where they planned to fish.

Sardine Film Takes Honors

The Fish & Wildlfie Service produced educational film, "It's the Maine Sardine", took first prize in the public relations series at the 10th International Exhibition of Cinematographic Art in Venice, Italy. The film was produced for the Maine Department of Sea and Shore Fisheries and the Maine Sardine Packers Association. It shows the catching of sardine herring off the Maine coast and the methods of packing used in local canneries.

1949 Handbook of Fisheries Laws Available

The Department of Sea and Shore Fisheries has announced that its 1949 handbook of laws, rules and regulations has been published and is ready for distribution. Copies may be obtained by writing to the Department headquarters in Augusta or from coastal wardens and supervisors.

The new booklet contains all statute laws and regulations as of September 1, 1949, including actions by the last Legislature. Commissioner Richard E. Reed said that there had been many changes since the 1947 edition, and disclosed that for the first time all Agriculture laws and related statutes pertaining to the fisheries were included.

Maryland Commission Denies Crab Pot Area Extension

The Tidewater Fisheries Commission has rejected a request that crab pot fishing areas on the Eastern Shore be extended. A group of Talbot County crabbers had asked for the opening of Poplar Island Narrows and the lower part of Eastern Bay to use of the devices.

These shallow-water areas traditionally have been trot-line grounds. Chairman David H. Wallace said the Commission voted against revising the regulation on the ground that Maryland's general conservation policy has been to ban the use of crab pots in the tributaries. Crab pots are legal in the deep waters of Chesapeake Bay proper, Tangier Sound and the Potomac River.

Crabbers from Smiths Island and Hoopers Island have requested that the Fisheries Commission extend the crabbing season two months—a month early and a month late. A spokesman for the group, former Commissioner John E. Clark, said crabbers favored beginning the season April 1 instead of May 1 and continuing it until December 1 instead of November 1, because: (1) It was felt in most instances that the extension would more closely parallel the actual run of crabs in the lower Bay; (2) Pressure on oyster bars would be decreased because many crabbers would continue crabbing instead of oystering; (3) Virginia crabbers are not confined to a six-month season which places Marylanders at a disadvantage.

Expect Good Oyster Dredging Season

The oystermen were ready, with boats and crews, when dredging began in the Maryland waters of the Chesapeake Bay on Nov. 1. A good season is expected, as several State planted areas will be open for dredging. More licenses for dredge boats have been issued this season than for several years.

There are only a few dredge boats out from Crisfield. Smiths Island has five and Deals Island 3. Most of the crews on dredge boats work on shares.

The Tidewater Fisheries Commission has given notice that it intends to enforce strictly the law limiting the size of oyster dredges. All dredges over 200 lbs. are illegal. The limit for scrapes used in dredging on rock bottoms is 42″. Dredges used on mud bottoms may measure 44″ across.

Although dredge boats in Chesapeake Bay tributaries were required to have their licenses by the start of the season, dredge boats of the Bay proper will be allowed a 30-day period of grace. The Bay boats are heavier.

Big Crab Run in September and October

The run of crabs in September and October this year was larger than it has been for years. Soft crabs were shedded all during the month of October. A large quantity of soft crabs were put in cold storage. Hard crabs fell in price, because there was such a big run that the packers could scarcely handle them.

New Plane for Law Enforcement

The Department of Tidewater Fisheries has purchased a new seaplane for use in its program of law enforcement on the Bay. The plane carries a full complement of photographic equipment and supplies with which to aid in the enforcement activities. Annapolis will be the base of operation for the plane.

Capt. Frank Akers to Retire

After serving continuously for forty-six years with the Tidewater Fisheries Commission, Capt. Frank Akers, Rock Hall, retired on November 1. His first position was mate on the *Anna B. Smith*, a two-masted schooner which was used for patrol work. Capt. Akers later took command of this boat, his first captaincy, and his commands have been various since that day, including the *Murray*, *The Kent*, and *The Chester River*.

September Seafood Production Shows Increase

Totalling 1,403,000 lbs., seafood production in the Crisfield, Ocean City and Cambridge areas of Maryland for September showed a gain of 47,000 lbs. over the September, 1948 catch. The fin-fish take was 338,100 lbs., while that of shellfish was 1,064,900.

The 60′ dragger "Marise", owned by Capt. William H. McLaughlin of Stonington, Conn. She is powered with a 5-cylinder, 140 hp., 500 rpm. Wolverine Diesel.

Connecticut Laboratory To Get Research Boat

The Interior Department appropriation bill for the current fiscal year carries a contract authorization for a boat for the use of the Milford Fish & Wildlife Service laboratory. The laboratory, of which Dr. V. L. Loosanoff is director, is engaged in work in Long Island Sound to produce a more adequate supply of seed oysters and to overcome the destructive effects of starfish and other oyster enemies. The Service has been requested to proceed as rapidly as possible in carrying out this provision so that steps may be taken to obtain the appropriation and proceed with the construction of the boat.

Dr. Loosanoff and his staff have been conducting experiments in the laboratory's aquaria and outdoor tanks to establish once more the rate of damage that various species of crabs cause to oyster set. The results showed that any species of local crabs possessing strong claws will attempt to crush oyster set if other food is not available.

The laboratory also observed the destruction of other mollusks by crabs. Blue crabs opened and devoured some experimental quahogs, measuring over 2″ in size. The crabs crushed and ate large numbers of soft clams, especially those of small size. As a result of these findings, Dr. Loosanoff has asserted that there is no doubt that in nature crabs cause extremely heavy mortality among clam set and young clams.

Scallops Scarce in Stonington Harbor

Scallops are scarce this year in the waters of Stonington harbor, Conn., and at Point Judith and Galilee, R. I., while at Niantic Bay, Conn., and Tiverton, R. I., they are plentiful as they ever have been.

Some fishermen claim that unrestricted power dredging last year cleaned them out. Others blame the scarcity on the mysterious cycles of these shellfish, recalling that in 1940 scallops jammed the Stonington harbor bed, and that a year or two later they were gone. Four years later they were back again and plentiful.

Ocean City had the largest landings of finfish, accounting for 319,500 lbs. of the whole production. Fluke was the top variety in the finfish catch, landings of that species having totalled 100,700 lbs. With 78,500 lbs., croaker took second position.

By a wide margin, Crisfield was the leading section as far as shellfish are concerned. The yield at the port amounted to 814,400 lbs., while Cambridge, which was next, had only 245,300 lbs.

Fish have been scarce in the Chesapeake Bay in general this year. Only rock have been plentiful.

The shrimp trawler "Miss Morgan City" carrying a load of spectators during the recent blessing of the fleet ceremonies at Morgan City, La.

Gulf Exploratory Fishing To Be Done by "Alaska"

By a supplemental appropriation, Congress, as one of its last acts, provided funds to rig out the vessel *Alaska* for exploratory fishing in the Gulf of Mexico. About $35,000 of $83,000 total will be for converting the boat which is at present tied up at Seattle, Wash. A. W. Anderson of the Fish & Wildlife Service says the available funds may be sufficient to do about four months fishing, and he estimates it will be after the first of the year before the *Alaska* goes to sea.

Funds to operate and convert the *Oregon* as a biological and oceanographic research vessel were not provided by the Senate, and it is not known just what may be done to get this boat in operation.

Shrimp Pack Gaining

The Gulf shrimp industry had the best week's run of shrimp for the season in the week ending October 15. The pack for the week hit 39,895 cases, but the season's total of 329,120 was 57,750 cases behind that of a year ago.

Morgan City Channel Inadequate

Because of inadequate channel facilities at Morgan City, La., that area is faced with losing two new fish processing industries attempting to locate there. There are maintenance problems in the present channel at Morgan City which would be very expensive for the Government to remedy, and there has been objection to the recommended relocation of the present channel.

John Santos, producer and distributor of fresh and frozen shrimp and fish at Patterson, La., with a branch plant in Cameron Parish, has decided on Morgan City as the site for a menhaden factory, provided his 10 to 15′ draft boats can navigate the channel route to Morgan City.

He commented as follows on the matter: "The fish are located just off Morgan City, and we have not been able to find any inlet close enough to fish with the exception of the inlet at Morgan City. It is my understanding that you now have 8′ of water, and if it were possible to some way dredge the channel to a 15′ depth, it would mean that construction of the plant could be started immediately."

Owners of a West Coast tuna fish industry called at the Chamber of Commerce office in Morgan City on Oct. 11 to discuss finding a suitable location in the Morgan City area for a tuna canning plant. The visitors, Cecil W. Drake, San Diego, Calif.; Lewis L. Livesley, Torrance, Calif.; and Joseph Martinac, Tacoma, Wash., expressed the opinion that a location at Morgan City would be more advantageous than one at any other town along the Gulf, provided the channel could accommodate their 15 and 20′ draft tuna clippers.

Sues Oil Company for Oyster Bed Damage

Henry Cenac of Houma, La. and others filed suit in 17th Judicial District Court Oct. 13 against a New Orleans oil company for $12,500 in damages to an oyster bed owned by the plaintiff. The affidavit charges the oil firm was engaged in geophysical operations in the area of the bed and the use of dynamite rendered it worthless.

The affidavit said further that Cenac had planted 3,000 sacks of oysters in the bed and should have harvested 5,000 sacks during the 1949-50 season. The amount sued for represents the price of 5,000 sacks at the current market levels.

The affidavit alleges that the defendant has admitted trespassing on Cenac's oyster bed, but has not stated the exact amount of damage.

Good Shrimp Catches

High shrimp boats reported at Morgan City, La. for the week of October 24 and the early part of the following week were as follows: *Miss Ramos*, 42 barrels, Anthony Protich, captain and owner, and Twin City Fishermen's Co-op, packer; *White Eagle*, 41 barrels, Stevie Kovac, captain and owner, Twin City Fishermen's Co-op, packer; and *Lady Esther*, 39 barrels, Harold King, captain, J. R. Hardee Co., owner and packer.

At Patterson, the following shrimpers had good catches: *Bob Ramsey*, 45 barrels, Durwood Theriot, captain, Patterson Shrimp Co., owner and packer; *Augusta*, 30 barrels, David Rose, captain, Sea Shrimp Co., owner and packer; and *Invincible*, 30 barrels, Jerry Rock, captain, Versaggi Shrimp Co., owner and packer.

While some green shrimp are being sold, the market is unsteady and the majority of the shrimp are being frozen. Heavy production in Texas of "brownies" bought and sold at a cheaper price than the white shrimp of Morgan City waters is said to be partly responsible for the present low demand for white shrimp.

Claim No Edible Fish Taken with Menhaden

A group consisting of several members of the Mississippi Legislature, the Game and Fish Commission and the Seafood Commission made an investigation Oct. 20 of the taking and unloading of menhaden along the Mississippi Coast, and reported that no edible fish were netted with the menhaden. The investigation was the result of complaints received by the Game and Fish Commission and the Legislative Committee on Game, Fish and Wildlife during the past two years relative to the taking of menhaden along the Mississippi Sound by use of purse seines. Charges were made that game fish in quantities were being taken along with the menhaden.

In the more than 200,000 lbs. of fish the group saw caught, they did not observe one edible fish taken. They further inspected a processing plant at Pascagoula and watched the unloading of other boats than those which they had observed taking fish, and still failed to observe any other species than menhaden. The group therefore reached the conclusion that as menhaden are a migratory salt water fish and are unsuitable for human consumption, the Game and Fish Commission does not have jurisdiction in taking them, but the same are under the exclusive jurisdiction of the Mississippi Seafood Commission.

57′ combination shrimp and party fishing boat "Honeymoon" owned by Capt. Eugene Graham of Bayou La Batre, Ala. She has a 70 hp. Caterpillar Diesel, 2:1 Twin Disc reduction gear, Hyde propeller, Columbian rope, Surrette batteries and 25-watt RCA telephone and uses Esso oil.

Fishing boats in the water parade, a colorful highlight of the recent blessing of the fleet festivities at Morgan City, La.

New Jersey Is Having Good Oyster Season

Guy Hickman, director of the New Jersey State Division of Shell Fisheries, reports that the oysters along the Jersey Cape are plentiful and of especially good quality this season. The calm waters this year gave the oysters time to grow, and they are said to be fatter and more flavorful than they have been in 10 years.

Tropical water temperatures and the reported Jersey shoreward movement of the Gulf Stream eddies are the reasons given in Wildwood for a record-shattering oyster harvesting season now in progress in the Delaware Bay waters bordering Cape May and Cumberland Counties.

A large fleet of 171 boats are engaged in sailing out of such Southern Jersey ports as Port Norris, Bivalve and Maurice River in pursuit of the oyster. New Jersey has leased out 31,628 acres of oyster beds in the Delaware Bay vicinity. Thirteen shucking houses are located along the Delaware River.

Make Large Catches of Blues, Fluke, Weaks

Fishing continues good off Long Beach Island, with large catches of bluefish, fluke and weakfish being made the entire length of the Island. Little Egg Harbor Bay and Barnegat Bay have been especially good localities for catching weakfish, particularly at night.

Beach Haven charter boat captains have reported good catches of weaks and blues. Capt. Richard Johnson in his *Four Sisters* brought in a catch of 30 weakfish Oct. 8. John Kelly, Jr., and party from Philadelphia, boated 119 weaks Oct. 9. Most boats reported catches of between 50 and 100 weaks, many of which tipped the scales at three pounds. Tuna have been reported as being 60 miles offshore.

New Boats at Wildwood

The 38′ dragger *Marie* is among the new boats in the O. K. Fishermen's Association fleet out of Ottens Harbor, Wildwood. The *Marie* was constructed by the John S. Olson & Son Boat Yard, Wildwood, and is equipped with a 6-cylinder Chrysler engine, with 4:1 reduction gear.

Two new boats are under construction at the Olson yard. Nearing completion is a 45′ boat for Heiser and Bryan of Brooklyn, N. Y. Olson is also constructing a 50′ boat for Jessie Chapman of Brooklyn, N. Y.

Overhauling Activities

The 38′ dragger *Ella R.* is at Al's Marine Railway, Wildwood, for installation of a 6 cylinder Superior Diesel.

The Harry J. Mogck Boat Yard, Schellinger's Landing, Cape May, recently installed a Bendix depth recorder on the 110′ dragger *Viking* of the Cold Spring Fish & Supply Co. fleet. Jim Marshall, captain of the *Viking*, which is a reconverted World War I submarine chaser, is the skipper who boated the world's record sea bass off Cape May last Spring. It weighed nearly 10 lbs.

The Mogck Boat Yard also has completed installation of a Bendix depth recorder on the 50′ dragger *Antares*, of the Cape May fleet.

Sandy Hook Inlet Proposed

Proposed construction of an inlet across the base of Sandy Hook peninsula, or at a point slightly farther south, was favored by most witnesses appearing at a public hearing conducted Oct. 21 in Middletown by the War Department.

Arguments advanced by proponents included the point that commercial fishermen would be benefited by the quicker access to the ocean. It was also claimed that such an inlet would improve the clamming industry in Sandy Hook Bay.

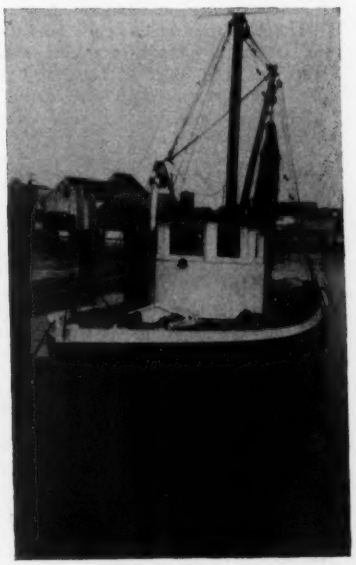
Besides providing a quick route to the open sea for commercial and pleasure craft, saving a two-hour journey around Sandy Hook, the proposed inlet linking the Shrewsbury River and the Atlantic Ocean would provide a safety short-cut for small craft caught in storms on the ocean side of the hook.

Surveys have been completed for the dredging and deepening of Ottens Canal at North Wildwood, at an estimated cost of $75,000; Ottens Harbor, Wildwood, $22,500; and West Wildwood, $10,000. The improvements concern the dredging and deepening of the waterways.

DDT Spraying Harmful

Dr. Melbourne R. Garriker, assistant biologist in charge of the Little Egg Harbor branch shellfish research laboratory, has reported that the recent aerial spraying of the marshlands of that area with DDT as part of a mosquito extermination program was harmful to seafood.

On August 24, he reported, three planes gave the marshes a thorough dose of DDT. Thousands of young alewives (about 6″ long) were poisoned as a result of the spraying. Crabs and gulls ate the dead fish and they too succumbed. The small fiddler crabs were struck even more disastrously than the alewives, thousands being found dead two days later.



The 50′ dragger "Twilight" owned by William Walker of West Cape May, N. J., and skippered by Capt. Charles Walker. She is painted with Pettit paint and equipped with a 120 hp. Cummins Diesel, Twin Disc 3:1 reduction gear, 38 x 36 Columbian propeller, Kaar radiotelephone and direction finder, Submarine Signal Fathometer, Jr., Smith Meeker electric pilot, and Linen Thread Co. Gold Medal nets.

Great Lakes Fishing Laws Liberalized

Substantial concessions to commercial fishermen of Green Bay and Lake Michigan have been granted by the Wisconsin Conservation Commission in a recent rewriting of the commercial fisheries regulatory code for those waters.

The order generally grants closed seasons that are more favorable for the fishermen, but it denies the often repeated demand for a relaxation of the size limit rule on perch taken from Green Bay. The minimum size on perch taken commercially will remain at 8″.

The new closed sesaon schedules for the principal varieties of commercial fish are as follows: Lake trout, Oct. 10 to Nov. 10, instead of Oct. 10 to Nov. 15; whitefish, Nov. 1 to Dec. 10, instead of Oct. 10 to Dec. 10; and chubs, Nov. 1 to Nov. 30, instead of Oct. 10 to Nov. 15.

In Green Bay waters, there will be a uniform closed season on yellow perch, suckers, wall-eyed pike and pickerel from April 10 to May 19, instead of the varying dates that have prevailed heretofore.

Fishermen must remove all nets from the waters of Lake Michigan and northern Green Bay between the dates of Nov. 1 and Nov. 30, and on southern Green Bay between April 10 and May 19, but permits will be issued to fishermen for the taking of species that do not spawn during these periods.

The Commission also has dropped the traditional mesh size rules for the entrapment-type nets, including fyke, drop and pound nets, so that regulation of harvest will be by means of minimum size limits imposed for the fish, principally trout and whitefish, taken with such gear.

One provision in new Michigan commercial fishing regulations closes the area within one-half mile radius of Two-Hearted River, Luce County, to commercial fishing.

More liberalized regulations now in effect permit seines not more than 100 rods in length nor more than 5′ in depth for taking noxious fish in Wildfowl Bay; allow use of seines for taking carp, within a mile from shore, between Pte. Aux Barques Light and Harbor Beach; and provide for opening St. James Harbor on Beaver Island to commercial fishing.

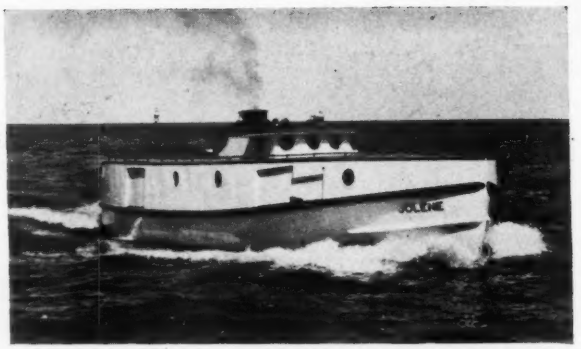
Lake Superior Trout, Whitefish Takes Good

Following a noticeable slump in mid-September, lake trout yields from Lake Superior suddenly took an upturn, and before the season closed October 10 several big hauls of this species had been made. Lake Superior whitefish yields also have been good recently. The season on lake trout reopened November 4.

In Lake Michigan the season for trout was closed from October 10 to November 10. Lake Huron, which closed October 1, was reopened on October 31.

The regulation banning the taking of lake trout during spawning season to permit maximum natural production of fish in lakes has been in effect for many years. Changes in conservation laws applicable to commercial fishing in Michigan waters on the Great Lakes, now in effect, include the requirement that commercial fishermen advise the Conservation Department, within 24 hours after the close of the season, of any species of fish held over.

The 55′ fishing tug "Badger" owned by Endress & Masse Fisheries of Grand Marais, Mich. and skippered by Capt. Parmer Masse. Her equipment includes a 90 hp. Diesel with Joes gear, Willard batteries, Bludworth depth recorder, Columbian rope and Fish Net & Twine nets, and she uses Socony-Vacuum oil.



Fishing tug "Jolene" owned by Joe Felbinger of Joe's Fisheries, Chicago. She is fitted with 120 hp. Kahlenberg Diesel, Submarine Signal Fathometer, Gold Medal nets and Crossley air net lifter, and has a top speed of 11 knots.

From Green Bay waters production of perch and small whitefish has been fairly good recently. Trout takes have been light; walleye pike, among several other mixed varieties of fish, are being landed regularly. The catches, however, have been only fair. Herring are beginning to show up in this area, and several good hauls of these fish have been reported.

Herring takes from Lake Michigan are improving with colder weather. Production of mixed fish from this, the second largest of the five Great Lakes, has been running fair to good, but trout takes have been low.

From Lake Huron and the Straits of Mackinac areas fish production generally has declined except for whitefish, herring, and several species of soft-flesh varieties such as suckers.

Since the use of nylon nets in Lake Erie, where such netting is used more extensively than in the other Great Lakes, whitefish and even trout production has risen amazingly. The Fall production of Lake Erie perch has been very good thus far, and on the whole, commercial fishermen have been enjoying a lucrative fish take in this region.

Lamprey Eel Appropriation

The Senate amendment to the Interior Appropriation Bill, providing $256,000 for the investigation and eradication of lamprey eels, was adopted by the House in the final appropriation measure.

Fishery scientists at the Great Lakes Laboratory of the Fish & Wildlife Service at Ann Arbor, Mich., emphasize that any program directed toward the study and control of the sea lamprey must take account of the indirect effects of the sea lamprey. For instance, Lake Superior's trout potentiality is 30% below that of former years due to the increased rate of exploitation, rather than by direct attack of the sea lamprey. This decline in the trout fishery has caused fishermen to redirect their efforts to other species of fish, such as the chub.

In Lake Michigan, the take of chubs has increased more than 400% in the last few years. Commercial fishermen are greatly concerned about the maintenance of the fishery under this increased catch.

Changes in Service's Great Lakes Staff

Dr. John Van Oosten, chief of the Fish & Wildlife Service's Great Lakes Fishery Investigations at Ann Arbor, Mich. since 1927, was authorized by the Service on Oct. 10 to relinquish all administrative and supervisory duties, and will henceforth be concerned exclusively with completing his analysis of the results of the numerous projects which he has carried on during the past years. With the Service about to undertake an expanded program of investigation into the depletion of the fisheries of the Great Lakes due to the depredations of the sea lamprey, there is urgent need for the study and release of much valuable data on the fisheries of that area.

With Dr. Van Oosten's withdrawal from administrative activities, the direction of the Great Lakes program of the Service

has been taken over temporarily by Dr. Ralph Hile, who has been a member of the Great Lakes staff since 1932. His special interests in fishery work have been the study of factors of growth and abundance in populations of fish and the analysis of commercial fishery statistics.

Michigan Fish Production

During the first seven months of 1949, approximately 11,500,000 lbs. of fish were taken from Michigan waters of the Great Lakes by commercial fishermen, according to a report by the Michigan Conservation Department. This includes final June and July reports of 4,250,000 lbs. The yield is expected to increase during the Fall and Winter, when the bulk of the herring catch is made. Production for the entire 12 months of 1948, which was better than average, exceeded 30,000,000 lbs.

Declining lake trout production continued in all the Great Lakes, with a total June and July take of 533,000 lbs. from Michigan waters. The bulk of the catch, 510,000 lbs., was from Lake Superior. Only 503 lbs. were reported taken by Lake Huron commercial netters.

The whitefish haul from Michigan waters continued average to above normal, with 1,123,000 lbs. netted. Lake Michigan was the best producer, with 718,000 lbs.

The two-month report reflects a decreasing yellow pike-perch take of 233,500 lbs. Saginaw Bay fishermen hauled in only 51,000 lbs. The yearly take prior to 1944 averaged 1,000,000 lbs.

Records at Lansing, Mich., show a great increase in walleye production in the last four years. The catch is several times the prewar harvest of walleyes in Green Bay waters. However, most of last Spring's catches were younger fish, indicating a decline in the walleye population.

Fish Tug "Bob S." Hit by Ore Carrier

The fish tug *Bob S.*, owned by William Sellman Fish Co. of Manistique, Mich. and skippered by Harry Hughson, was struck by the ore carrier *David N. Weir* of Cleveland, 18 miles off Manistique harbor in Lake Michigan on October 3. Although she was badly damaged, the tug was able to make port under her own power. None of the crew was injured.

NEW YORK

"Anna S." Sinks Off Montauk

The 48′ fishing boat *Anna S.*, owned by Capt. Carl Reiter of Greenport, N. Y. foundered about seven miles northeast of Montauk Point on Oct. 14, while en route to Block Island. Capt. Edward Kart, Jr. of Greenport and Adam Binkus escaped in a small dory carried aboard the dragger. The two men battled rain squalls and fog through the night and finally landed safely on Gardiners Island early the following day.

Scallopers Land Tuna; Big Fluke Catch

Along with their regular catches of scallops, two draggers brought in tuna when they landed at Fulton Market, N. Y. early last month. On October 6, the *Catherine C.* hailed for seven tuna fish in addition to 1000 gallons of scallops, and on the following day the *Mary Ellen* had 1000 lbs. of tuna as well as 450 gallons of scallops.

Thomas Thomassen of West Sayville, skipper of the *Sadie Nickerson*, recently brought in a fluke weighing 29 lbs., caught in 30 fathoms off Shinnecock.

Menhaden Steamers at Brigham's Shipyard

Brigham's Shipyard, Inc., Greenport, is busy hauling and putting into Winter storage a number of fishing boats. A fleet of seven of the fishing steamers owned by the Smith Meal Co. arrived at the yard the middle of October and are moored at the Company's wharfs for the Winter.

The fleet consists of the *Edward J. McKeever, Stephen McKeever, Wilbert A. Edwards, John Lawrence, A. Brooke Taylor, Elias Wilcox* and *Pocahontas*. During the Winter months, repair work will be done on the vessels.

The 38′ x 13′ x 3′ trap fishing boat "South Bay", owned by South Bay Fish Co., West Sayville, N. Y. and operated by Capt. Edward Ockers. She is equipped with 110 hp. Chrysler engine with 2.5:1 reduction gear, 26 x 17 Columbian propeller and uses Gulf oil, Gold Medal nets and Columbian rope.

Two Boats Change Hands

Melvin Midgett of Hampton Bays has sold the fishing vessel *Liberty* to Jack and Vern Tuttle.

The 33′ *Fay G.*, owned by William Griek of Islip, has been sold to Henry and Harvey Kurdt of Lindenhurst, who are skimmering for Bob Doxsee.

Sterling Basin, Greenport Harbor Opened

Sterling Basin and Greenport Harbor will be open for the taking of shellfish during the months of December, January and February. These waters were totally closed for a long period of time.

New Engine for "Rockaway Belle"

A 4-cylinder, 9¼ x 14 Wolverine Diesel, rated 160 hp. at 400 rpm., has been sold to Rockaway Belle Corp. of Brooklyn, N. Y. for installation in their fishing vessel *Rockaway Belle*. The engine beds were installed at Muller's Boat Works, Brooklyn, after which the vessel was towed to Bridgeport, Conn., for engine installation at the Wolverine factory dock.

Party Fishing Boat "Striper" Total Loss

The 42′ party fishing boat *Striper*, owned by Capt. Harry Horton of Greenport, was destroyed by fire and explosion on Sept. 26 while laying at her mooring in Montauk Harbor. There was no one on board at the time.

The *Striper* was built at the Hanff Shipyard, Greenport, and was launched in 1947.

Fishery Council Publicity

In the October issue of *Good Housekeeping* magazine is one of the best shrimp promotion pieces ever published. The Fishery Council cooperated in supplying much background information, and the Council's special cooking method is recommended to readers. Six beautiful color pictures show how easy it is to peel and de-vein shrimp, cook it for five minutes and serve it.

Alfred Tucker, Superintendent of Marine Fisheries of the New York State Department of Conservation, is responsible for an article in the current issue of the *Conservationist*, official magazine of the Department, entitled "Fulton Fish Market". Mr. Tucker does an excellent sales promotion job on the readers of this widely circulated magazine. The story includes among its pictures one excellent double-page photo of the Market.

Two television shows recently fell to the promotional efforts of the Fishery Council. Scallops, bay and sea, were exhibited by Louie Morino on Market Melodies, WJZ-TV. Louie showed how to tell the difference between the two and also how to prepare them. The Fishery Council's cook book was televised and offered to viewers. Milo Miloradovich, author of "The Art of Fish Cookery", was guest on the other Council promoted show. She demonstrated the preparation of smoked cod fillets and sea bass. This also was on the Market Melodies program.

Dr. Herbert F. Prytherch, formerly of the Fish and Wildlife Service laboratory, Beaufort, N. C., showing double mold technique for making papier mache cast of a sailfish head.

North Carolina Fisheries Show Continual Gain

North Carolina commercial fishing and shrimping are improving, according to a report submitted Oct. 24 to the State Board of Conservation and Development by Roy Hampton of Plymouth, who has been a Board member since 1937 and chairman of its Commercial Fisheries Committee since 1939.

Hampton cited statistics in his committee report showing that North Carolina fishermen took 32,000,000 lbs. of food fish in 1880 and 65,000,000 lbs. in 1946, the latest year for which figures are available.

During the same period, he said, the shrimp catch soared from 63,000 lbs. to more than 12,000,000 lbs. Furthermore, he added, the rise in both the fish and shrimp catch has been steady, except for occasional drops in depression years or years when the cause could be traced to some factor other than shortage of supply.

Although conceding that there might be places along the coast where the fishing picture varied, Hampton contended that on the whole North Carolina's commercial fisheries are getting better all the time.

Atomic Energy to Aid Shellfishery Research

An agreement has been concluded between the Fish & Wildlife Service and the Atomic Energy Commission to conduct cooperative research on shellfish and other marine organisms using radioactive tracer methods. The new research project—a survey of radioactivity in marine invertebrate animals—will be conducted at the Fisheries Biological Laboratory at Beaufort, N. C. The leader of the project is Dr. Walter A. Chipman, for many years engaged in studies on the nutrition, feeding and growth of oysters on the Atlantic coast.

One main objective of the study is to learn more about the accumulation in marine life of radioactive material and its possible effects on shellfish. Another objective is to learn more about the natural foods required by oysters for growth and fattening. Conditioning oysters for market has always been a problem of oyster growers.

Record Catch Landed at Atlantic

Lionel Mason of Atlantic, long-hauling Oct. 12, took a record amount of 300,000 lbs. of food fish at Harbor Island. The last of them were packed at Fulcher's fish house Oct. 17, five days later. Other boats were ordered to tie up for the weekend of the fifteenth, due to the large supply.

Clayton Fulcher, Jr. declared it was the biggest catch he could recollect. It was estimated that a million pounds could have been taken. The next biggest haul ever brought in, to Fulcher's knowledge, was 145,000 lbs.

Plastic Fish Model-Making Technique Developed by Fish and Wildlife

Last year, at the request of the Educational Section of the Fish and Wildlife Service, Dr. Herbert F. Prytherch of the Service's Beaufort, N. C. laboratory conducted an experimental project, the aim of which was to develop a method of casting plastic models of fish. Numerous molds for making casts of food and game fish were prepared of plaster of Paris and flexible rubber compounds in which many accurate, strong and relatively light-weight, plastic models were prepared in electric ovens by the use of Arco-Lite casting Resin.

From March through July, the laboratory made a total of 33 plastic fish models which were painted with iridescent colored lacquers containing pearl essence. A series of over 70 molds of local food and game fish also were prepared, composed of plaster of Paris, rubber compounds and Arco-Flex material, for immediate and future use since the casting of plastic models was usually destructive to the molds. The largest plastic casts were made of tarpon and sailfish 31″ and 32″ long and the largest mold made of a tarpon 6′ long.

The preparation of fish models was discontinued after July and the next four months were devoted to experiments and photographs concerning: the preservation of fish for original models; the construction of hard, flexible and soluble molds; the casting of fish models with plastic, rubber, papier-mache and plaster materials; and the curing, preservation and painting of the models with various lacquers, plastic resins, oil and alcohol paints over which an iridescent, pearl essence lacquer was applied for natural coloration of fish models. A leaflet of approximately 10 pages was prepared on "The Technique of Making Fish Models" with 15 photographic illustrations.

Shark Boats Operating off Morehead City

Commercial shark fishermen are again operating off Morehead City. This is the first season since 1947 that shark have been taken commercially out of that port. Best fishing grounds for the bigger sharks are located about 30 miles southeast of Beaufort Inlet. One boat, the *Mako*, which is especially rigged for commercial shark fishing, was reported to have caught 65 one day recently.

The boats engaged in sharking off the Morehead City coast normally operate off Stuart, Fla. They fish for a firm there which is a subsidiary of the Borden Co.

Bluefish Plentiful Off Southport

Bluefish have been very plentiful off Southport this Fall, and the party boats have made big catches of them. Capt. J. B. Church, who has been fishing off Southport for more than 35 years, says he has never seen so many big bluefish off the port as are now out there. He claims they average twice the size of the blues usually taken in the Fall months.

The prospects are for continued good fishing. Instead of going South, the boatmen report that the fish are moving eastward to get on Frying Pan Shoals, one of the best places on the coast of North Carolina for them to be taken by trolling.

Using Depth Recorder for Rockfish

One of the first of the new Model DR-9 Bendix depth recorders, with a range of from 0 to 200′, has been installed by Electronic Engineering Co., Norfolk, Va., aboard a boat owned by Clarence Midgett and captained by Jaccie F. Burrus. This is an experimental installation with the objective of determining the feasibility of locating rockfish in the shallow waters around Manns Harbor, N. C. The boat on which the installation was made has been renamed *The Fish Finder*.

A Bendix Model DR-7 depth recorder has been installed aboard the *Oriental*, owned by G. F. Fulcher of Oriental and captained by Walter Stowe. This boat is a former German Sea Devil converted for shrimping use. The installation was made by the Ensley Radio Co. of Bayboro.

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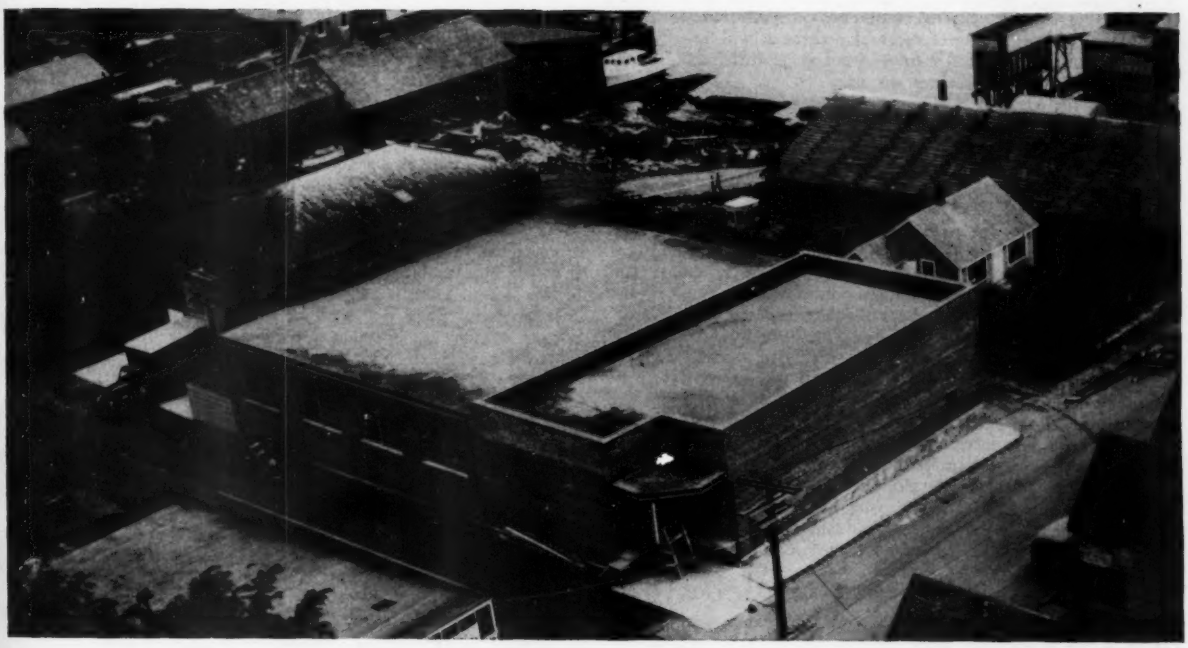

The new ice plant officially opened last month at Rockland, Maine, by F. J. O'Hara & Sons, Inc., assures an ample, dependable supply of purified ice for fishing boats.

With a daily output of 120 tons and a storage capacity of 450 tons, the plant is the largest of its kind serving fishermen in Maine.

It represents one more milestone in the pioneering program of F. J. O'Hara, who continually has endeavored to provide better facilities for fishermen.

Prompt icing service now is available at all times, not only for local boats but for all boats which land at the growing port of Rockland.

Purified ice lasts longer and is more sanitary because all impurities are filtered out. With this ice, you can keep your fish hold cleaner and bring in better quality trips.

With two large up-to-date packing and freezing plants at Portland and Rockland, equipped to handle millions of pounds of fish annually, O'Hara offers a reliable, profitable outlet for fish catches.

The production of these plants assures a continuous supply of quality Maine seafoods. F. J. O'Hara's "Tip Top" brand products, packed in attractive red, white and blue cartons, hold nation-wide fame as the peak of excellence.

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Propeller Shafts

(Continued from page 16)

rank in certain order, or series, as to their susceptibility to galvanic corrosion. Those metals within each group can be used together even though they are in contact and immersed in salt water. Contrary to a once-popular superstition, you can safely use Monel in combination with copper, bronze and copper-nickel alloys. Thus the familiar hook-up of a bronze strut, bronze propeller and Monel propeller shaft is not a breeder of galvanic corrosion. However, once you start connecting metals from two or more different groups in salt water, watch out for electrolysis. The least noble metal may eventually disappear through galvanic corrosion.

Size of Shafting to Use

Those of you who are building a new boat, or repowering an old one, will have to wrestle with the question of what shaft diameter to use. If you are working with a naval architect, he will be able to take this selection task off your hands. Those doing the job without architectural assistance will usually find that the manufacturers of their engine and propeller will be able to make valuable suggestions on size.

To provide a rapid and simple means of checking on your shaft diameter selection, Chart 1 has been prepared, boiling all the intricate calculations down to a so-called nomogram. If you are interested in picking the proper diameter for a new Monel shaft installation, or checking to see whether your present Monel shaft is of the proper size, just get yourself a ruler and pencil to use with the chart.

You of course know the maximum horsepower of your engine. You also know the propeller revolution speed at full throttle. (If you transmit the engine power through gears, either reduction or step-up, be careful to use the proper rpm. and not the engine speed.) Now all you have to do is lay the ruler down on the chart in such a way that it touches the proper horsepower figure on the left scale and the appropriate propeller rpm. factor on the right scale. Draw a straight line between these two points. Remove the ruler and you will see that the pencil line intersects the center scale at a point which represents the proper diameter Monel shaft for you to use. For instance, if your engine develops 110 hp. at 3200 rpm. and drives through 2:1 reduction gearing, you should find that the chart calls for an 1-3/4" shaft. (This table is based on a factor of safety of 5, considered adequate for conservative design.)

Spacing of Shaft Bearings

Another factor of prime importance in proper shaft application is the spacing of supporting bearings. Such bearings are those provided by stuffing boxes and struts. Since any propeller shaft is a comparatively skinny piece of material to be handling the assortment of loads which are heaped upon it, it is highly important that it be properly supported by bearings along its length.

In locating your supports, you will find it simple and helpful to check Chart 2. To use this chart you will merely have to keep in mind your propeller rpm. and the shaft diameter previously chosen. Rule a line from the spot on the shaft diameter scale (second from left), equivalent to the diameter you plan to use, to the point on the Modulus of Elasticity scale representing the material in your shaft. Then rule a line from your propeller rpm. figure on the extreme left scale across the middle vertical line at the point crossed by your first ruled line. Extend this second line through this point to the right hand scale where it will indicate the proper bearing spacing. (This chart also is based on a factor of safety of 5.)

When you have determined all the necessary dimensions of the propeller shaft for your boat, you will, in all probability, order it from a recognized supplier of boat shafts who will be equipped and trained to machine it properly. If, for any reason, you must have the machining done by a job-shop not accustomed to doing propeller shaft work, you must be doubly cautious. Many shops do not realize the need for extreme accuracy in machining tapers and keyways in marine shafts. The higher the speed at which your shaft is to turn the more essential is meticulous machining, but sloppy work cannot be condoned on the slowest turning of them.

Machining and Fitting the Shaft

If your machinist does not already know, you can tell him that the dimensions of standard propeller shaft tapers, threads, etc. can be found in any recent handbook of the Society of Automotive Engineers.

One of the commonest machining boners in this type of work is to turn the taper while the shaft is not perfectly centered in the lathe. When this is done, your taper comes out cocked and your propeller will wobble in the operation like the wheel on a badly beaten-up automobile. But while the auto wheel's greatest effect is in wearing out tires, a propeller wobbling from a cocked taper will cause vibration throughout the boat and shorten the life of both the propeller and the shaft.

Keyways present another problem that is often given the casual treatment by some machine shops. The keyway in your shaft must be absolutely parallel with the center line of the shaft. If the keyway is cut out of line by even an invisible amount, you may have to trim the key so much to make it fit that its "keying" properties will be sadly depleted.

Keyways must always be cut radially into the shaft—that is, the center of the milling cutter must make initial contact with the center of the curved surface of the shaft. If this set-up is not followed carefully, you will be unable to fit a key that will do a really effective job of transmitting shaft torque to the propeller.

Engineers have found that the square corners of a keyway designed for low-stressed machinery are incipient danger spots. You can see that the gouging away of the metal to form the shaft keyway in itself reduces the shaft diameter at that spot to a point way below the diameter of the main part of the shaft. This alone tends to make this the weakest spot of the whole shaft. Then, with a square keyway, we apply heavy loads that concentrate in those square corners, inviting early fatigue of the metal.

It has been found that a slight filleting, or rounding, of these bottom corners can provide double the fatigue strength of the same diameter shaft with conventional keyway.

Suggested Radii for Filleted Keyways

Approx. shaft diameter	Keyway fillet radius
3/4" to 1 1/8" incl.	1/32"
1 1/4" to 2" incl.	1/16"
2 1/4" to 3" incl.	3/32"
3 1/4" to 4" incl.	1/8"
4 1/2"	5/32"
5" to 5 1/2" incl.	3/16"
6" to 6 1/2" incl.	7/32"
7" to 8" incl.	1/4"

Here are some further points to keep in mind in connection with the machining and final fitting of your shaft and propeller:

(1) Check the fit of your propeller on the shaft taper. Coat the shaft taper very lightly with Prussian Blue. Then carefully slide the propeller up on a taper, without a key. With the propeller full up on the taper, turn it by hand so that it slides around on the shaft taper. Now pull the propeller off and check to see how much of the inside of the propeller hub is stained blue, indicating contact with the shaft. If this blued area is not continuous from bow to stern of the hub, your propeller is very likely to shake around in operation. This may damage shaft, key or propeller—so make them fit before you put power to them.

(2) Limit the shaft overhang between the after support and the propeller hub to no more than one shaft diameter. This is to reduce whip and vibration.

(3) Be sure that the shaft bearings are so carefully aligned that the shaft can be turned readily by hand at any time the clutch is disengaged. If this cannot be done, you have a potentially dangerous misalignment.

New Building for Georgia Fisheries

A new building will be constructed at Brunswick for use of the Coastal Fisheries Division of the Georgia Game & Fish Commission. The facilities will include offices, a shop, docks, and a monorail hoist for boats. The Division has purchased a new 25' cabin cruiser with a 145 hp. engine from a Titusville, Fla. boatbuilding firm.

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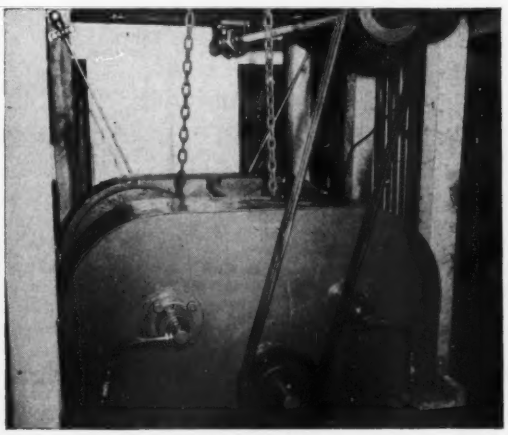

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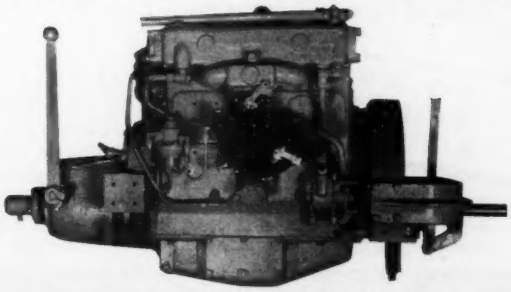

The KERMATH SEA JEEP, equipped with front end power take-off. Options of reduction gears from 1½:1 to 4:1.

An interesting application recently reported uses a Sea Jeep with 3:1 gear in a 40 ft. work boat. It replaced a 115 H.P. Six. Top speed same as before—gas consumption, one-half. Better read this again—this means money to you.

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Thousands of boats today are still getting dependable service from early-model Lathrops, years after other engines of similar age and service have been scrapped. It's no wonder that Lathrops have the confidence of successful fishermen.

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Look into a Lathrop before overhauling or replacing your old engine. There are twenty-one models, gasoline and diesel, ranging from 21 to 187 hp. Sales and service, located in key ports. Parts are always available.

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THE Lathrop ENGINE CO. MYSTIC, CONNECTICUT

SINCE 1907 MANUFACTURERS OF RELIABLE MARINE ENGINES

Virginia Oyster Prices Higher This Season

Prices at the Virginia oyster plants are from 50 to 75c above last season's closing prices for shucked stock. The State's official oyster season for harvesting from public beds extends from October 1 to March 31 (certain areas excepted), but during the closed season oysters are obtained from private grounds. Shuckers are being paid the same as last season, from 75c to $1.00 per "gallon" (9 pints), according to locality.

To meet the shortages created by the widespread mortality of oysters on both public and private beds in the Rappahannock River, the shucking houses in this area are using "plants" or privately grown stock from the York River area. Tongers in the Rappahannock area report that they are getting about one-half or less than the amount harvested a year ago.

The Virginia Fisheries Commission's Yorktown laboratory is studying the situation, but as yet has found no cause for the oyster mortality. Officials report that the mortality is widespread on the upper Rappahannock, in the area from Towles Point to Morattico, and that there is some mortality on the Eastern Shore and in the York River.

Dr. J. D. Andrews, oyster biologist at the laboratory, said he has sampled 10 bars in the Rappahannock River area, and that mortality ranges as high as 70% in many of them. He reported that in some areas of the York River the rate of mortality is 10 to 15%.

In the Towles Point-Morattico district extensive study has shown that the dead oysters are found mostly on strips straddling channel areas, in other deeper waters, and on both mud and shell bottoms. The mortality was found high on both private and public shores. No dying oysters were present, and the empty shells indicate that the oysters died in mid-summer.

The Fish & Wildlife Service is checking on the type of parasite previously found in some beds, in an effort to determine whether it could have caused the trouble in midsummer. Also interested in the case is the Texas Research Foundation, which plans to make a detailed examination of the oysters.

Menhaden Production Drops

Landings of menhaden this season through September 17 were 162,655,000 fish, or about 25 million less than for the corresponding period a year ago. Boats have been catching menhaden in the Bay as far north as Reedville very close to shore, an infrequent occurrence in late years. The schools are reported small, but the size of the schools does not necessarily govern the size of the catch.

Pompano Appearing

Some pompano have been appearing in Virginia waters, and recently one haul netted slightly over 300 lbs. of this fish. Small catches of little tuna have been made in the lower Chesapeake Bay.

Hampton Roads Fish Production

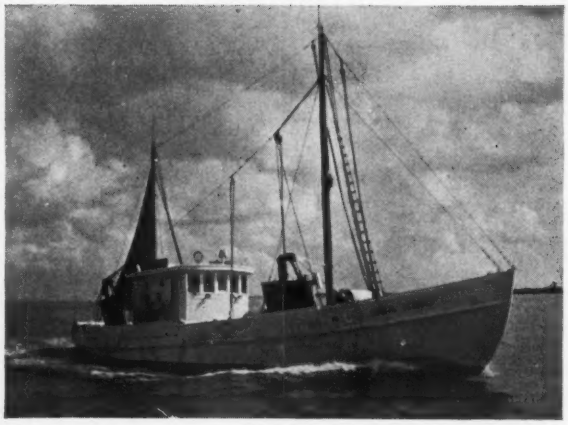
October fish production in the Hampton Roads region amounted to 639,500 lbs., including 361,500 lbs. taken from pound nets, and 278,000 lbs. landed by draggers. As compared to September, the catch dropped 767,800 lbs., and was 98,500 lbs. less than in October of last year. The leading species was croaker, with 84,000 lbs., while scup, with 74,200, was second, followed by sea trout, with 70,600.

Will Introduce Bill to End "Oyster War"

Plans for introduction in the 1950 Virginia Legislature of a bill designed to permanently end the recurring Maryland-Virginia "oyster war" on Potomac River waters have been announced by Delegate Charles F. Unruh of Kinsale.

Unruh first plans to call a conference of interested persons from both States in the hope of arriving at a mutually agreeable solution. He then would draft a bill for introduction in the Virginia Legislature in January, with an identical bill to be submitted later to the Maryland Legislature.

The two States in 1947 established a joint study commission which subsequently recommended a joint control authority, not just for the Potomac, but for the Chesapeake and its major tributaries as well. This proposal was rejected by the 1948



The 86'9" dragger "Sea King" owned by George H. Walker of Hampton, Va. and skippered by Capt. A. M. Olssen. She is equipped with a 265 hp. Hendy Diesel with 2:1 reduction, 54 x 34 Hyde propeller and Willard batteries.

Virginia Legislature because of strong opposition from Virginians in the tidewater area.

Behind the "oyster war" troubles of the two States have been the Potomac's dwindling oyster resources and differences in opinion on oyster-taking methods. Maryland conservationists have strongly opposed power-dredging to harvest oysters, a system advocated with some limitations by Virginia.

New Telephone on "Athodyd"

Electronic Engineering Co., Norfolk, has installed an 80-watt Hudson American radiotelephone on the *Athodyd*, a trawler operated by J. S. Darling and Son, Hampton, and skippered by Glen Wilson.

Biologists Meet at Woods Hole

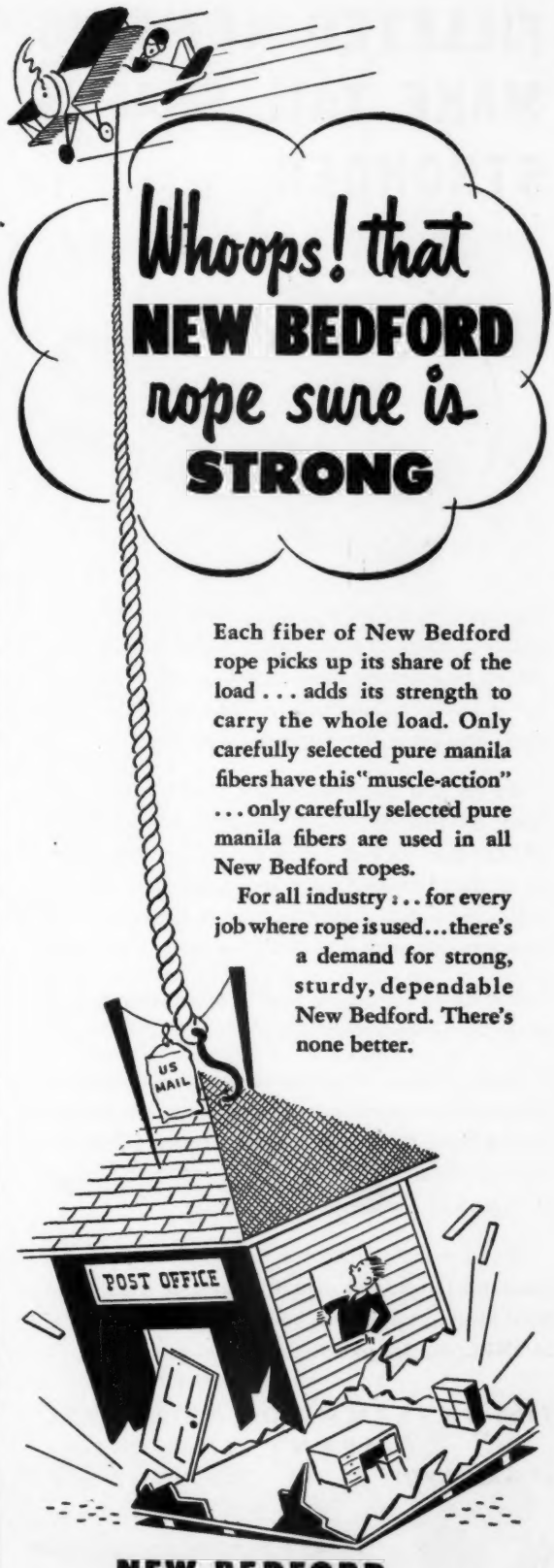
The Atlantic Fisheries Biologists held their annual meeting at Woods Hole, Mass. on September 16-18. This organization is composed of professional fisheries biologists engaged in the investigation of problems in fisheries in both fresh and salt water.

Gathered at the U. S. Fishery Research Laboratory for the three-day discussions were 45 members representing the U. S. Fish & Wildlife Service, Fisheries Research Board of Canada, Maine Department of Sea & Shore Fisheries, Maine Department of Inland Fish & Game, New Hampshire Fish & Game Department, Massachusetts Division of Fisheries & Game, Connecticut State Board of Fisheries & Game, New York State Conservation Department, University of New Brunswick, University of Maine, University of New Hampshire, Springfield College, Harvard University, University of Rochester, Woods Hole Oceanographic Institution, and Massachusetts Fish & Game Assoc.

Several general discussion groups were held at which the broad aspects of the subjects were discussed. Dana E. Wallace opened the debate on the status of clam research on the Atlantic Coast. The clam and quahog work of the Fish & Wildlife Service, the Fisheries Research Board of Canada, the various States, and the Woods Hole Oceanographic Institution, was reviewed.

A discussion of the new tools and techniques used in fisheries research was opened by A. H. Leim of Canada. Investigators described much of the new equipment developed during and after the war. Methods for tagging fish to study migrations were described. A forum on "The Responsibilities of the Biologist Towards Improving Fisheries" was led by R. Reed Logie of Canada.

William R. Martin and Frank D. McCracken of the Fisheries Research Board of Canada, St. Andrews, New Brunswick, were elected President and Secretary-Treasurer for the coming year to succeed Howard A. Schuck and Louis D. Stringer of the U. S. Fish & Wildlife Service, Woods Hole, Mass. The members visited the U. S. Fishery Research Laboratory, the Marine Biological Laboratory, and the Woods Hole Oceanographic Institution. At these places the physical facilities and the specific research problems were examined.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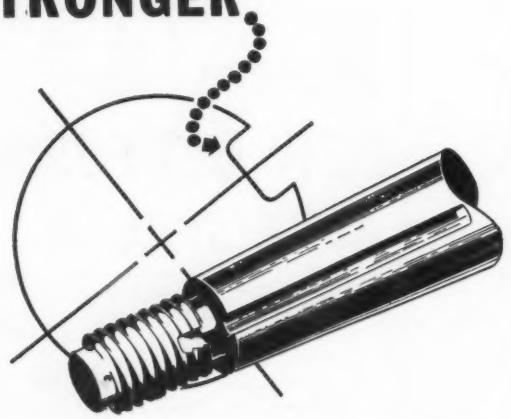

Your propeller shaft's weakest point is at the sharp, square corners in the bottom of the keyway. But merely by *rounding* these corners...machining them to the correct radius during milling of the shaft keyway...you get a safer, stronger shaft.

To get full information and machining instructions on this important development, write for INCO's new booklet: *"How to Get the Most From Your New Monel Shaft."* It lists the correct fillet radius for each size shaft to 8 in. diameter and tells where to get cutters for milling filleted keyways.

And here's something to remember when buying or replacing a propeller shaft...

Shafts made of MONEL* are running up remarkable service records in many of the nation's busiest fishing fleets. Fleet operators report substantial savings in repair bills because of MONEL's high strength and resistance to corrosion.

If you want a shaft that is rustproof, corrosion resistant, tough, and actually stronger than structural steel...make sure your next one is made of MONEL, the Seagoin'* metal.

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"It's the SEAGOIN' metal"*

*Reg. U. S. Pat. Off.

The 51′ New Bedford dragger "Mishaum" owned by Capt. Dan Mullins of South Dartmouth, Mass. She is skippered by Capt. Simeon Boutilier and powered by a 70 hp. D8800 Caterpillar Diesel, sold by Perkins-Eaton Machinery Co.

New Bedford State Pier May Be Developed for Fishermen

A bill that would convert at least part of the New Bedford State Pier for use of the fishing industry was filed Oct. 31 by Senator Edward C. Peirce of New Bedford. A $2,000,000 appropriation for construction of a freezer and other facilities to aid development of the industry is called for. The proposed facility would be operated by the State or leased under the bill.

There is contained in the legislation a provision that the State would proceed with construction only if there is a contract with a future tenant at a rate sufficient to cover 60% of the construction costs over a 20-year period.

Trash Fish Landings Large

A total of 11,188,735 lbs. of fish were landed in New Bedford during October, of which 5,495,700 lbs. were trash fish. High among edible varieties was yellowtails, with 3,028,225 lbs. (6,265 better than the previous month); and blackbacks, with 753,995. Deep-sea scallop landings totalled 826,827 lbs., and brought $314,149. The price of .3799 per pound was slightly higher than that commanded by scallops in September.

9-Day Limit for Trips Discontinued

The Atlantic Fishermen's Union, New Bedford branch, voted in special meeting late in October to discontinue limiting large draggers to 9-day trips. The move was made in an effort to bring more fish into port. Fishermen pointed out that spoilage is unlikley with the approach of colder weather.

Salt Sea Fish Property Sold

The Salt Sea Fish Co. property, Greene and Wood Wharf, New Bedford, was sold at public auction October 27 to Walter R. Smith of New Bedford, owner of Seaview Fish Co., Homer's Wharf. The last occupant of the site, now vacant, was Eldridge Scallop Co., Inc.

Strafing of "Sharker I"

Strafing of the fishing vessel *Sharker I* at No Mans Land September 2 has prompted Air Force headquarters to direct that no object on the ground "which might conceivably have material value" be used as an aiming point. Connecticut Air National Guard was responsible for the attack. An investigation proved that the *Sharker I* was in Air Force practice waters at the time of the strafing.

Overhauling and Outfitting

Hathaway Machinery Co., Fairhaven, converted the 85′ *Eunice-Lilian*, owned by John Gobell of New Bedford, from scalloper to dragger this month. This firm has equipped Capt.

Fred Landry's 65′ New Bedford dragger *June Bride* with a 1335-40 Hathaway hoist.

Beaconside Boat Co., Fairhaven, completed an overhaul and Winterizing job on the 60′ Provincetown fishing vessel *Viola D.* in October. Manuel Dutra is owner and skipper of the craft, which is rigged for both scalloping and dragging. Beaconside's major railway, one of the largest in the area, was expected to be ready for use by the latter part of November.

A Submarine Signal Fathometer has been installed aboard Morris Phillips' scalloper *Muriel and Russell.*

The *Victoria,* owned by Capt. George Adams of Provincetown, has been equipped with a new Model 8234 Hathaway winch.

"Agda" Hauls Up Big Anchor

A two-ton anchor was brought ashore October 9 by the New Bedford scalloper *Agda,* from 9 miles north, northeast of Race Point Light. The anchor is believed to be that of the 240′ steamer *Portland,* which went down in that area in 1898, while enroute from Boston to Portland, Me., with a loss of 176 lives. Ten feet long and with 25 or 30 fathoms of chain (200 fathoms were cut loose), the huge catch broke the *Agda's* galley spar and two tackles during the eight-and-a-half-hour hauling operation.

Capt. Ralph H. Clattenburg of New Bedford, skipper of the vessel, said that by the time the crew realized what was in the drag it was too late to release the rusted, barnacled anchor and the hauling had to be completed.

Alfred Gaustad Lost at Sea

Alfred Gaustad of New Bedford, 38, was lost at sea October 26 when he was hurled overboard from the scalloper *Jerry and Jimmy* 10 miles southeast by east of Pollock Rip Lightship. The accident occurred when the fisherman's oilskins caught in the drag while it was being set.

Cape Cod Boat Nets Plane

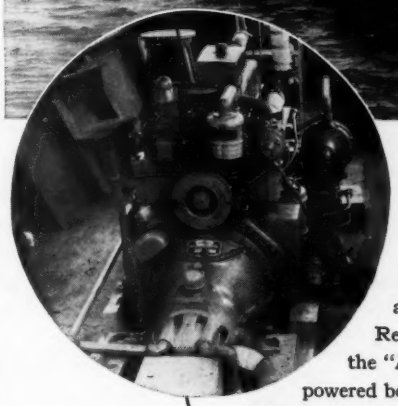
Wreckage of a single-engined plane which crashed in the sea the middle of October was brought ashore October 24 by the Provincetown fishing dragger *Atlanta.* Joseph Silva, skipper of the *Atlanta,* reported that the wreckage stove in the side of the vessel and caused a leak when the crew attempted to haul in the nets several miles off Race Point.

Rhode Island Dehydrating Plant to Be Started

A building permit has been issued to the Point Judith Dehydrating Co., whose president is John Ryan of Boston, for a 50′ x 175′ steel and concrete dehydrating plant at Galilee north of the State Dock, and construction will start soon. The owners of the dehydrating firm expect that in time the new plant will result in doubling the size of the Galilee fishing industry.

The Story OF TWIN DISC MARINE REVERSE GEAR No. 1038

The "Aleta," owned by O'Neal and Futcher, off on another trip to Ocracoke Island.



Insert: Twin Disc Marine Reverse Gear No. 1038 and the Caterpillar diesel engine that powers the "Aleta."

Back in 1939 . . . fresh from the assembly line . . . Twin Disc Marine Reverse Gear No. 1038 signed onto the "Aleta," a 42′ Caterpillar-powered boat that carries mail and passengers from Atlantic, North Carolina, to Ocracoke Island . . . a round trip of 60 miles. Twin Disc used only the best of materials when Marine Reverse Gear No. 1038 was assembled . . . heavy-duty clutches . . . oversize bearings . . . and heat-treated alloy steel shafts . . . assurances of a maximum work-life. That's why, in its 10 years of service, No. 1038 has been able to work a total of 33,000 hours with minimum time off. All Twin Disc Marine Reverse and Reduction Gears are capable of providing long years of work-life, whether on the "Aleta" or on *your* boat. Twin Disc builds Marine Gears for marine engines ranging from 20 to 325 hp. Write for Bulletin 142. TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).

Power Take-off

TWIN DISC MARINE GEARS

Machine Tool Clutch

Marine Gear

SPECIALISTS IN INDUSTRIAL CLUTCHES SINCE 1918

The Mascot III makes two trips daily between Point Loma and the Coronado Islands, San Diego, carrying sportfishing passengers.

(Left to Right) Capt. Shears, morning skipper, Bill Hoss, part owner of the Mascot III, and Capt. Sisson, afternoon skipper, beside the Bendix "Bantam" in the pilot house.

Fishing is better... navigation is safer with a BENDIX DEPTH RECORDER

The H & M Sportsfishers who operate the Mascot III, pleasure fishing boat, out of San Diego, are most enthusiastic about the performance of the Bendix "Bantam" Depth Recorder which has recently been installed aboard the boat.

The Mascot III makes two trips daily between Point Loma and the Coronado Islands, and both Capt. Mel Shears, in charge of the morning trip, and Capt. Lewis Sisson, who pilots the Mascot III on the afternoon trip, agree that their job of locating fish for their customers has been made simpler and surer.

The safety factor for all-weather navigation has also been increased. The two scheduled trips per day can now be readily maintained as foggy weather navigation is no longer the hazard it was before the "Bantam" was installed.

Ask your dealer to show you the model that will do your job best.

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Massachusetts Makes Trial Plantings of Oysters

Twenty bushels of Cape Cod oysters have been experimentally planted in the Parker and Mill Rivers in Newbury by the Marine Fisheries Division of the Massachusetts Conservation Department in an effort to re-establish the oyster industry in that area. A generation ago oysters were available in considerable abundance in the region.

Oysters of various ages were selected for the trial plantings so that shellfish culturists of the Marine Fisheries Division may learn the growth rate of Cape Cod oysters in North Shore waters. Massachusetts is at the northerly limit of the major oyster producing territory, and there are only a few instances of oysters being found north of Cape Cod.

Francis W. Sargent, director of the Marine Fisheries Division, has asserted that under favorable conditions the experiment is "at least worth a hopeful try at Plum Island Sound, which has a considerable flow of fresh water and warm water conditions during the Summer season."

The shellfish will be examined periodically during the coming months by Dan Pierce, shellfish supervisor of Newburyport.

Trawlers Catch Mackerel

Three Boston trawlers landed 47,000 large mackerel Oct. 7, which were caught on Northeast Rip in the Channel area. They were the *Wave*, with 23,000 lbs.; the *Winchester*, 17,000; and the *Michigan*, 7,000. The mackerel caught by the *Wave* brought approximately $4,500.

Reward for Tagged Haddock

The Fish & Wildlife Service tagged over 1,200 haddock from the *Albatross III* on Georges and Browns Banks in June, 1949. Upon finding any of these tagged fish, cutters, handlers and fishermen are urged to retain both the tag and fish and notify James Miggins, Fish & Wildlife Service, Commonwealth Pier, Boston (Tel. LI 2-1513). A reward of $1.00 will be paid for each tag returned.

Georges Bank Haddock Catch

Some 94,160,000 lbs. of haddock, or about 36,875,000 fish, have been taken from Georges Bank in each average year of the 17-year period from 1931 to 1948, according to a report by the North Atlantic Fishery Investigations at Woods Hole. The average weight of each fish was 2.55 lbs.

It is estimated that during the first 9 months of 1949 the destruction of baby scrod on Georges amounted to 2,776,000 lbs., as compared with 2,618,000 lbs. in 1948 and 7,897,000 lbs. in 1947. The decrease is said to be due to the small size of year-old classes since 1945, rather than any change in fishing practices.

A. L. Parker

A. L. Parker, president of P. H. Prior Co., Fish Pier, Boston, died November 7 at the age of 75. Born in Duxbury, Mass., Mr. Parker entered the fish business at T. Wharf, Boston, in 1892 with Arnold & Winsor Co. Later he became owner of this Company, which was consolidated with the Prior firm in 1933.

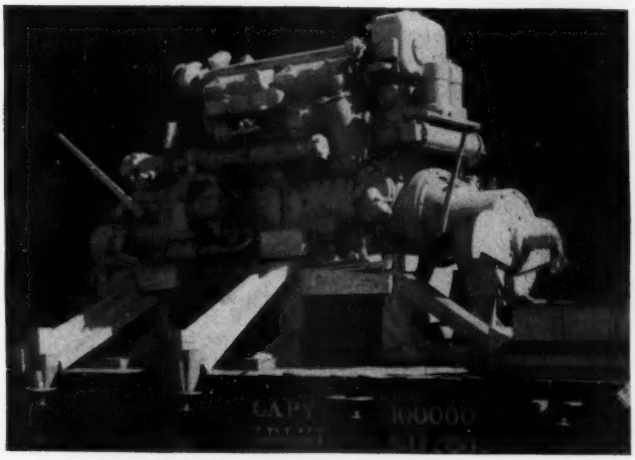
Mr. Parker was a director of New England Fish Co., Boston Fish Market Corp., Commonwealth Ice & Cold Storage Co. and Federated Fishing Boats of New England and New York. He had served as president of the Massachusetts Fisheries Association.

An owner of fishing vessels for many years, Mr. Parker at one time operated 12 craft. The only remaining boat in his fleet is the *Geraldine & Phyllis*, the *Venture II* having sunk recently.

Densmore Made Wickwire N. E. Manager

S. W. Densmore has been made New England District Sales Manager for the Wickwire Spencer Steel Division of Colorado Fuel & Iron Corp., with office at 80 Federal St., Boston. He succeeds Herbert D. Rollo, who died on October 8.

First 215 H. P. Cat Marine Engine Arrives in Boston



Here it is at last, --- the first, long awaited large horsepower Caterpillar Marine Engine arrived in Boston in October. This latest Cat masterpiece of engineering, a full 215 HP., is now on display in our show room on Dorchester Avenue, South Boston.

COME IN AND SEE IT

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Newfoundland Fisheries

(Continued from page 17)

foundland are accounted for by codfish and related species. In value terms, these species represent two thirds of the total. Codfish products are relatively low priced as compared with some of the other fishery products of the east coast, and with most of the products of the British Columbian fisheries.

In considering the nature of production in Newfoundland according to the main categories of products, it is interesting to note how the new Province will alter the Canadian output of these major groups. The outstanding change in total production will occur in the category of dried salted fish. Newfoundland production of this group of products was somewhat below normal levels in 1948, being about 105 million pounds (dried basis). In the previous year, it had been 130.7 million pounds. Even at the 1948 level, however, it is 2.1 times that of the rest of Canada. Pickled fish production in Newfoundland amounted to more than 200,000 barrels in 1948 as compared to 125,000 in the rest of Canada. The overall increase in cured fish production—including smoked fish—should be about 160% at normal production levels.

The Newfoundland fisheries are usually classified according to production by the inshore fishery, the deep sea fishery and the Labrador fishery (prosecuted by both "stationers" and "floaters"). The deep sea fishery operations were carried on by 103 vessels last year. The 131 schooners in the Labrador fishery brought the total number of large craft engaged up to 234 vessels. These vessels were manned by 2,200 fishermen. Their landings accounted for about 26% of the dried codfish production last year. The inshore fishermen, therefore, supplied 74% of the cod for salting. Much of the catch for the frozen form is supplied by trawlers, the number of which has increased in recent years.

Exports

From April 1, 1949 on, statistics of Canada's export trade in fishery products will include shipments from Newfoundland. In consequence, not only will the export totals increase, but their distribution both between types and between countries will change, because the Newfoundland export pattern differs considerably in these respects from that of the rest of Canada.

In 1947, nearly 2,000,000 lbs. of live lobsters were exported from Newfoundland to the U. S., and in that year, shipments by air freight to the U. S. increased. As recently as June of this year 12,000 lbs. of Newfoundland lobsters arrived in Maine by air. In 1948, the U. S. imported a total of 15,788,865 lbs. of groundfish fillets from Newfoundland. This amount is approximately three times the quantity imported from that Country in each of the two preceding years.

Total Newfoundland exports were equal to about one quarter of Canadian exports in 1947, and to about one third in the following year. Salt cod accounts for nearly two thirds of Newfoundland's exports. Its relative importance in Newfoundland's exports is about 10 times as great as it is in the exports of the rest of Canada. In absolute figures, the value of salt cod exports from Newfoundland in 1947 was more than 2.75 times that of the corresponding Canadian exports of dried and green salted codfish. In 1948, Newfoundland's production increased further and the combined value of other cured fish exports (which includes boneless dried cod from Canada) was in both years over one third higher than that of the Canadian exports taken by themselves.

Fresh and frozen fish, the leading type among Canadian domestic exports, was increased by 7% in 1947 and by 11% in 1948, when direct and indirect Newfoundland exports were added. Canned fish exports were virtually unaffected as Newfoundland exports to foreign countries were less than 1% of corresponding Canadian exports. Newfoundland exports of other types in 1947 more than equalled those of Canada which themselves consist largely of processed imports from Newfoundland. Owing to the considerable increase in Canadian fish meal exports in 1948, however, Newfoundland's exports of other types in that year amounted to not much more than one third of corresponding Canadian exports.

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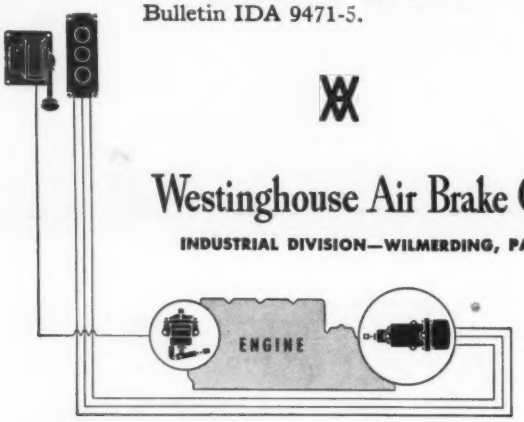
Here is a quality power control stripped to essential elements. Air pressure does all the work. Clutch shifts at the push of a button . . . throttle is positioned by flicking the speed control lever. Same proven principle used on controls of large, modern coastal and river craft. Easy installation—all connections made with ⅜" copper tubing. Ask for Bulletin IDA 9471-5.



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In comparison to the average propellers, MICHIGAN wheels will save several times their cost in fuel economy, alone, to say nothing of their finer, faster, vibrationless performance. That's because they're built with absolute accuracy by our super "MACHINED-PITCH" method, and designed to convert every bit of engine energy into smoothly delivered thrust.

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BUYING A PROPELLER

MICHIGAN *MACHINED-PITCH* **PROPELLERS**

Next time you need a propeller, try a MICHIGAN. You'll be amazed at the extra performance it gives.

MICHIGAN WHEEL COMPANY
Grand Rapids 3, Michigan

Oyster Industry

(Continued from page 15)

areas. It is of interest that the oysters produced at the time were shipped to Baltimore and sold as Chesapeake oysters. This practice still exists at the present day. Many oysters are shucked, packed and reshipped by Chesapeake dealers.

More oysters are being shipped out from shucking houses instead of in the shell. Since 1946, at least 35 new shucking houses have been constructed. These are modest but clean, efficient plants; a marked contrast to the sheds of past years. According to Caldwell, chief sanitarian, the trend has been toward smaller plants located as near as possible to the oyster-producing areas, instead of larger houses near a railroad center. This past season there were 63 shucking houses in the State, with 28 certified for inter-state shipping. Twenty-five shucking houses are located in the Pamlico Sound area. Two steam canneries operated last season, utilizing the coon oysters from the Beaufort Inlet area.

Within the past few decades some changes have occurred in the area. The hurricane of 1933 opened 28 inlets between Beaufort and Ocracoke Inlets and ruined the oyster beds at Harbor Island. Most of the new inlets have closed except Drum Inlet. The salinity in the vicinity of Drum Inlet has increased to over 30 parts per 1000 as compared to an average of 23 parts per 1000 reported by Galtsoff and Seiwell (1928). Clams are now abundant in an area where oysters were produced in marketable quantities.

Pamlico Sound is virtually free of predatory enemies. The boring sponge does cause damage to oysters in North and New Rivers. In the upper regions of Middle and Caffee Bays, the shells of all oysters examined, over two years old, were heavily riddled with sponge. Polydora is prevalent in widely separated localities with heavy infestations in the oysters growing on the shoals at Ocracoke Inlet. Mussels cover oysters to form large masses in the head of Jones Bay, Swanquarter Bay and other localities.

Regulations

The private leasing of grounds for oyster culture has been emphasized since the time of Winslow's survey in 1886. This supposed solution to the problem of increased oyster production and development of the industry has not been too popular. Leasing of bottom is permitted within the State with limits of 50 acres in the tributaries and 200 acres in Pamlico Sound. However, the Counties of Hyde and Pamlico prohibit leasing of bottom. There are at present but 3,232 acres under lease. The majority of these grounds average 10 acres and are used to raise oysters for family use or to supply oyster roasts. These leased areas are found chiefly in the tributaries of Core and Bogue Sounds.

The legislature of 1947, upon the recommendation of a committee appointed by Gov. Cherry, passed a law imposing a tax of 50c on every bushel of oysters going out of the State in the shell. Attempts to repeal this measure were defeated during the 1949 session. Opponents of the tax believe that North Carolina could be developed into an important seed-producing area and believe that such a tax is hindering this program. There are areas where an abundance of seed could be procured in Bogue, Core and Pamlico Sounds. A question arises whether the available seed should be used within the State to maintain and encourage the industry or be allowed to leave the State. There may be sufficient for both purposes.

The legislature of 1947 also passed a regulation specifying the return of 50% of the shells accumulating at the shucking houses, thus inaugurating a definite shell-planting program. A tax on oysters harvested from the natural beds was increased from 4 to 8c per bushel. The increased revenue is to aid in meeting the expenses of shell plantings. In 1947, 63,258 bu. of shells were planted. In 1948, this amount was increased to 95,919 bu. In 1949, 119,517 bu. of shells were planted as the State's quota with an additional 34,000 bu. of shell purchased. Ten thousand bushels of seed oysters were transplanted as an experimental procedure in three counties.

Regulations requiring dredging with sail power and limitations on sizes of vessels were repealed in 1948. Heretofore, vessels over 32' in length were required to dredge with sails.

Texas Shrimpers Doing Well Off Mexican Coast

According to reports the latter part of October, shrimping off the coast of Mexico was above average. The municipal docks at Port Isabel frequently handled more than 200,000 lbs. of red shrimp during a single day.

White jumbo shrimp were very scarce in waters of the Gulf adjacent to Port Aransas during the month. Weather generally was not favorable for long trips offshore where the larger shrimp are found. Most of the shrimp from the Gulf landed at Aransas Pass and Corpus Christi were of the "red" type. Shrimping in Corpus Christi Bay gained momentum the latter part of the month with boats taking upward of 2,000 lbs. per trip. Most of the shrimp from this source were in the 22-cent class.

Louisiana Shrimpers Denied Licenses

Louisiana shrimpers still can't get additional Texas commercial fishing licenses. The Texas Game, Fish and Oyster Commission on October 21 turned down their request that the license quota for the fiscal year be raised to 1,800 so 165 Louisiana boats could operate legally in Texas Gulf waters.

The Commission left the quota at 1,550, the same figure which it had authorized from July to Sept. 1, the beginning of the fiscal year.

To Study Trout and Redfish

A project has been undertaken by the Copano Research Foundation to study the trout and redfish of Texas inland bays. The project is under the supervision of J. L. Baughman, chief biologist of the Rockport Marine Laboratory; Dewey Miles, A. W. Anderson, and W. L. Haskell. Work will be conducted at Aransas Pass, Cedar Bayou, Mesquite, San Antonio, Espiritu Santo, and Matagorda Bays, in an attempt to establish the location of the spawning grounds for both trout and redfish as well as obtain other data pertinent to these two species.

Trawler "El Rancho" Damaged

The 70′ shrimp trawler *El Rancho* of the Aransas Pass fleet was damaged when she drifted on the beach south of Brownsville. The boat was towed to Gulf Coast Marine Ways for repairs.

The trawler, owned by C. O. Robert of Aransas Pass, was on her second trip. The boat was built recently at Morgan City, La. by the Conrad Industries.

Boat Basin for Port Aransas

The U. S. Army Corps of Engineers of Dallas have announced approval of a $30,000 boat basin project for Port Aransas. The projected basin would be located on the west side of the ship channel, and would be 900′ by 400′ and 12′ deep, or approximately twice the size of the basin now in use. A yearly allowance of $1,000 for upkeep was also recommended.

"North Star" Destroyed

The *North Star*, one of the largest shrimp trawlers operating on the Texas coast, was completely destroyed by an explosion which occurred while the boat was tied up at the freezer plant docks at Port Isabel. The skipper, Red Turner, was injured in the accident.

Marine Sciences Studied

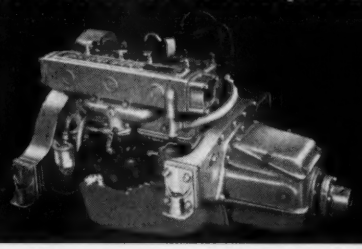
A Seminar and Field Study of Marine Sciences was conducted by the Rockport Marine Laboratory staff during the week of October 23. The program was designed to give Texas college and university students an opportunity to acquaint themselves with the marine sciences.

Menhaden, Shrimp Catches Gain

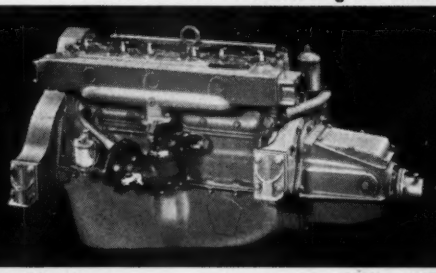
Landings of fishery products at Texas ports during September amounted to 12,563,248 lbs., compared with 5,698,000 lbs. in the same month last year. Two items, menhaden and shrimp, accounted for over 98 percent of the September landings. Shrimp production for September of this year was 4,917,000 lbs. compared to 3,637,000 lbs. in the same month last year. The September menhaden catch, all of which was landed in the Galveston area, totalled 7,352,000 lbs. as against 1,826,000 for the same period of 1948.

WORLD'S BEST BUYS IN MARINE ENGINES

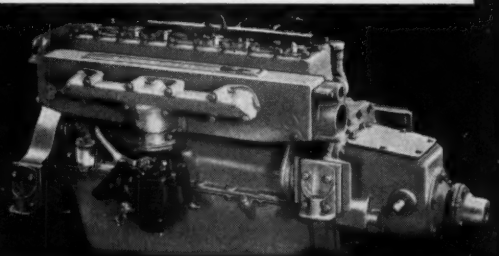
Built and backed by the world's largest manufacturer of marine products



Model B—Compact, power-packed Chris-Craft 60 h.p., 132 cu. in. Reduction drives available. A great value!



Model K—For more power and economy ... 95 h.p., 229 cu. in. Reduction drive, opposite rotation available.



Model M—Rugged, dependable ... 130 h.p., 320 cu. in. Available with reduction drive, in opposite rotation.

PROOF! PROOF!

Walter Masters

"Here's a record for you," writes Walter Masters, boat livery operator, Walloon Lake, Michigan. "A Chris-Craft Marine Engine has been in constant operation in one of my 18-footers since 1941. I rent this boat out by the day or week, and it has really seen hard service under all kinds of driving. The motor has performed perfectly with only one valve-grinding job in 8 years' use. The original piston rings are still in it, and it's not using a lot of oil. You can't wear a Chris-Craft Marine Engine out."

FISHERMEN! Buy the best for less—buy Chris-Craft Marine Engines. A complete line. Reduction drives ... opposite rotation ... also high speed engines for light, fast hulls. Ask your Marine Dealer, Boat Yard or Boat Builder for prices and data. These world-famous engines will do a better job for you.

Chris-Craft

MARINE ENGINE DIV., ALGONAC, MICH., U.S.A.

Equipment and Supply Trade News

Additional information, and copies of catalogs and booklets mentioned, may be obtained on request from the addresses listed in the items or by writing Atlantic Fisherman, Goffstown, N. H.

Nordberg One-Cylinder Diesel Bulletins

Nordberg Manufacturing Company, Milwaukee 7, Wisconsin, announces publication of four bulletins on its new one-cylinder 4½" x 5¼" Diesel engine, which are available on request. These bulletins give specifications, detailed information and outline drawings of Nordberg Model 4FS-1 Diesel engines as adapted to power take-off with and without clutch (167 and 167-A), generating units (166) and pumping units (168).

The four-cycle, one-cylinder Nordberg Diesel engines are rated at 15 hp. at 1800 rpm. and 10 hp. at 1200 rpm. The units are compact power packages built to provide power for a wide range of applications. They are supplied completely equipped and are available for hand and electric starting.

Keil Joins Surrette Battery

John J. Surrette, general manager of the Surrette Storage Battery Co., Inc., of Salem, Mass., has announced the appointment of F. W. Keil as marine and industrial sales engineer for the Company.

Mr. Keil has had 20 years of experience in the battery business, and was formerly associated with Thos. E. Hogan, Inc. of Boston. In his new position he will be available for technical assistance to fishing boat owners in analyzing their storage battery requirements and installation problems.

F. W. Keil

Chrysler Announces Hydraulic Control

A new low cost hydraulic control unit with advanced new features has been announced by the Marine Engine Division of Chrysler Corporation. Chrysler Royal, Crown and Ace Models now are available with the new control, which is built in at the factory as an integral part of the engine and which has its own separate pressure system. A manually operated safety feature is provided.

The control is a complete Chrysler-engineered unit, according to Robert Keller, Marine Engine Division president. It represents years of development work on the part of the Company's marine engineering staff and years of exacting tests on both sea and inland waters by its Marine Laboratory.

Easy, instantaneous shifting of gears is possible with the new control, thus making it advantageous in maneuvering. The split-second timing it provides aids in coordinating speed direction and distance with the wind, current or tide.

The control lever can be mounted in any desired position. Installation is greatly simplified because of the absence of rods and linkage. The control operates through a flexible cable with inside armor plating.

Reynolds with G. E. Electronics Dept.

Ross H. Reynolds, Jr., has been appointed a district representative for the General Electric Company's Electronics Department, and will have sales responsibility for marine electronic equipment in the New England, New York and Atlantic districts of the department. He will headquarter in the G. E. office building at 570 Lexington Avenue, New York City.

A native of Raleigh, N. C., Mr. Reynolds has been with General Electric since 1940, following graduation from North Carolina State where he received a degree in electrical engineering. From 1941 to 1946 he served in the U. S. Army as a member of the Signal Corps.

Cunningham, Manager of Carolina Tractor

James N. Cunningham, district representative for Caterpillar Tractor Co., has been appointed general manager of Carolina Tractor & Equipment Co., Salisbury, North Carolina, according to L. M. Weisiger, president of the Company.

After receiving a B.S. degree in Business Administration from Bradley University, Peoria, Ill., he joined Caterpillar Tractor Co. in 1935. During his 15 years' service with the industry, he has been associated with the accounting and treasury departments in various capacities.

James N. Cunningham

In the Fall of 1945 he entered sales training and was named Caterpillar district representative for the States of Maryland, Virginia and North Carolina, a position he has held until his recent appointment.

Fitler Celebrates 145th Anniversary

On October 20th, The Edwin H. Fitler Co. celebrated its 145th year of rope manufacture by being host to employees' families, those who had retired and friends. The occasion took place at the Main Factory in Frankford, Philadelphia, Pa.

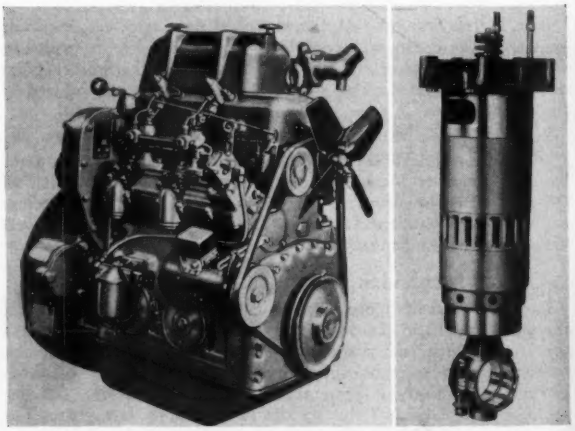
Over 300 guests were escorted through all phases of plant operation, and from pictures and other data they compared the former slow method of rope-walk manufacturing to present day modern machine efficiency. Manila and sisal products, including the largest of towing hawsers and the newest of pure white nylon yacht rope, were displayed.

P & H Two-Cylinder Lightweight Diesel

A new two-cylinder, two stroke, high speed Diesel engine has been added to the P&H Diesel line that is made by the Diesel Division of the Harnischfeger Corp., Port Washington, Wisc., and which ranges from 20 hp. to an intermittent rating of 175 hp. in the 6-cylinder model.

The two-cylinder Diesel engine is 28¼" wide, 40⅞" high and 32¼" long. Weight, complete with cast light metal alloy block, is 1030 lbs. and horsepower rating is 52.5 at 1400 rpm. The engine operates on a 16:1 compression ratio with a displace-

(Continued on page 42)

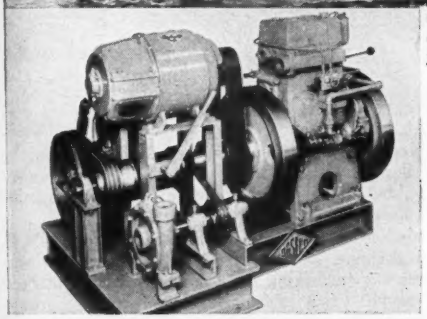


The new 2-cylinder, 52 hp. P&H Diesel and a sectional view of the patented power head.

HIGH-LINERS and *Lister-Blackstone* GO TOGETHER!

ON GORTON-PEW DRAGGERS

GORTON-PEW FISHERIES CO's. DRAGGER "MOTHER ANN", *one of a number of vessels in this firm's fine fleet equipped with Lister-Blackstone auxiliaries.*



LISTER-BLACKSTONE 16 H.P. 2-CYLINDER MODEL CE DIESEL *driving generator, bilge pump and compressor.*

BIGGEST GLOUCESTER DRAGGER, Gorton-Pew Fisheries Company's "MOTHER ANN" employs Lister-Blackstone auxiliary diesel power—as do the vessels of all of America's leading fishing fleets. *Power for propulsion and auxiliaries, 3 to 300 H.P.*

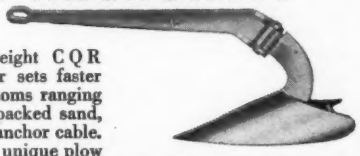
LISTER-BLACKSTONE, Inc.

Factory, Sales & Service Headquarters: 420 Lexington Avenue, New York 17, N. Y.

Parts Warehouses: MILWAUKEE, Wis., 3073 S. Chase St.; BOSTON, Mass., Whesco Bldg., Fish Pier

AGENTS: BOSTON, Diesel Engine Sales & Engineering Corp.; NEW YORK, Griffin Equipment Corp.; NORFOLK, Va., Curtis Marine Co.; NEW ORLEANS, La. (Branches at MOBILE, Ala., and TAMPA, Fla.), Calmes Engineering Co.; MIAMI, Florida, Auto-Marine Engineers; HOUSTON, Texas, Southern Engine & Pump Co.; NEWTON, Iowa, Winpower Manufacturing Co.; MONTREAL and TORONTO, Consolidated Engines & Machinery Co., Ltd.; WINNIPEG, Mumford, Medland, Ltd.; VANCOUVER, B. C., Hoffars, Ltd.; ST. JOHNS, Newfoundland, Clayton Construction Co.

A BETTER ANCHOR . . .



The new Maxim lightweight CQR non-fouling plow anchor sets faster and holds better in bottoms ranging from soft mud to hard packed sand, and *will not foul* on the anchor cable. Consistently reliable, the unique plow design has been widely used in British and American waters for years and thoroughly sea proven under toughest conditions, even in the '38 hurricane. For better description SEND FOR OUR NEW BULLETIN.

AVAILABLE IN SIZES FROM 7 lbs. to 5575 lbs.

. . . AND A BETTER STOVE

If you're tired of replacing stoves, here's one that will stay with you. The Maxim Monel Stove, built to last a lifetime: wgt. 110 lbs.; length 21 in.; depth 15 in.; height 18½ in.; less space than many 2-burner alcohol or kerosene stoves; big oven; air-tight construction saves 50% fuel over average cast iron stove; thoroughly insulated; heats quickly; 6 to 8 hrs. on one filling of briquets. SEND FOR BULLETIN NOW.

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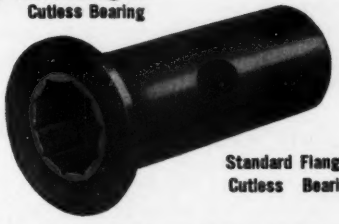
MAXIM
SILENCERS AND MARINE EQUIPMENT

B. F. GOODRICH
CUTLESS RUBBER BEARINGS
For Propeller Shafts

Stern Bearing with Cutless Bearing

Standard Cutless Bearing



Standard Flanged Cutless Bearing

Water lubricated Cutless rubber bearings provide smooth, quiet operation on fishing vessels. Outlast all other bearings by as much as 15 to 1. Save shafts—save time—save money. Most sizes in stock for immediate delivery.

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Lucian Q. Moffitt, Inc.
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Engineers and National Distributors

Really Rugged—
. . . that's
PITTSBURGH
HULL PAINT!

PAINT protection plus—that's what many builders and operators of fishing craft term Pittsburgh Hull Paint!

Of course, it's a tough, seagoing paint that provides maximum resistance to sun, wind, rain, ice and salt spray. It's *fume-proof,* too! It will not darken and discolor from industrial gases, cargo, fuel, foul water, dock and harbor sewage.

Pittsburgh Hull Paint also brushes freely, hides thoroughly and dries quickly to an extremely durable coating.

Pittsburgh has a complete line of high-quality finishes for every marine need. Write for free booklet that may save you time and money in upkeep.

PITTSBURGH PLATE GLASS COMPANY
Industrial Paint Division, Pittsburgh, Pa.
Factories: Milwaukee, Wis.; Newark, N. J.; Springdale, Pa.; Houston, Texas; Los Angeles, Calif.; Portland, Ore. Ditzler Color Div., Detroit, Mich. The Thresher Paint & Varnish Co., Dayton, Ohio. Forbes Finishes Div., Cleveland, Ohio.

PITTSBURGH *Marine Finishes*
PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS
PITTSBURGH PLATE GLASS COMPANY

(Continued from page 40)

ment of 174", and its extra heavy crankshaft is specially hardened and magnaflux tested.

The new two-cylinder engine uses the patent P&H cylinder head and liner assembly. This unit has a 4½" bore by 5½" stroke and is the heart of the P&H Diesel. The cylinder head is interchangeable from one engine to another and is removable in a period of forty minutes, which provides a saving in time on maintenance work and reduces the cost on major overhauls. Liners are of hardened steel alloy for longer wear. The entire assembly is completely water jacketed and thoroughly cooled. Water travels upward in the liner and passes between each intake port thoroughly controlling the temperature at that point.

The intake ports are specially machined on a compound angle sending the air from a root-type blower into the cylinder in a strong swirling motion, providing thorough scavenging of exhaust gases and complete combustion on next stroke.

The injector is a simple and efficient unit and has a large spray hole to eliminate clogging difficulties. One injector for each cylinder is conveniently located for rapid change when necessary. The injector pump is demountable and easy to remove. These units also are exchangeable from one engine to another.

Improved Surrette Shore Converter

A new, improved Shore Converter now is being offered by Surrette Storage Battery Co., Salem, Mass. The unit is housed in a durable, welded steel case, lacquered in black crinkle finish, and is 21" long, 14" high and 15" deep.

The new unit provides an instantly available supply of D. C. power merely by plugging into any 115 or 230 volt A. C. outlet, and is available for furnishing the following D. C. voltages: 6, 12, 24, 32, 64 or 110 volts, in capacities up to 50 amperes.

The Surrette Shore Converter enables a boat owner to use electric equipment, radio, and other electrical appliances freely while laying alongside and eliminates the necessity of running the auxiliary generator. It makes all electrical equipment available for continuous use, as well as maintaining the batteries at full charge.

It delivers a flexible supply of D. C. current, from a high rate when the batteries are discharged, to a low rate as the batteries become recharged. The charging rate automatically increases when lights or electrical equipment are used, directly in proportion to the amount of current required up to its capacity. When no current is being used, the charging tapers down to a rate of approximately one-half that of its original setting.

The unit is adjustable and has an additional trickle charge attachment for maintaining the charge in batteries when the boat is either laid up in wet or dry storage, or not being used for some time, thus preventing deterioration.

The converter also can be furnished with extra taps for supplying 6, 12, 24, 32 or other voltage for starting batteries. This additional circuit has a high and low switch to provide maximum charging current, as well as a low trickle charge setting for maintaining the batteries when the boat is tied up.

The new Surrette Shore Converter.

Woodruff with F-M Pump Division

T. E. Woodruff

T. E. Woodruff, formerly Manager of the St. Louis Branch House Pump Department for Fairbanks, Morse & Co., has been appointed Assistant Manager of the Pump Sales Division with headquarters in Chicago.

Mr. Woodruff started with the Company in 1912 in the Accounting Department. Following several years service in the AEF in the first world war he attended Iowa State College from which he was graduated in 1926 with Bachelor of Science—Civil Engineering. He rejoined Fairbanks-Morse in 1926 at Cincinnati. In 1929 he joined the St. Louis Branch organization where he continued until his present promotion.

Nordberg Sta-Nu-Tral Clutch

The Sta-Nu-Tral Clutch, Nordberg Manufacturing Company's recent development for the Nordberg gasoline marine engine, solves the problem of keeping the propeller dead still in the water when the clutch is in neutral, no matter how fast the engine may be running to drive the integral front flywheel mounted clutch power-take-off or pulleys.

Engine temperature does not affect the Sta-Nu-Tral Clutch for its same advantages exist throughout the whole range of engine temperatures. Another advantage of the newly designed clutch is that hard worked parts last longer and run quieter. Also, the inside of the reverse gear drum no longer acts as an oil centrifuge, and as a result remains clean.

With the Sta-Nu-Tral Clutch, commercial fishermen virtually eliminate the possibility of fouling their propellers with nets or lines when the wind blows their boats while they are using the front clutch power take-off to raise or lower the nets.

The mechanism principal is the same as for the former clutch on Nordberg gasoline marine engines. The Sta-Nu-Tral Clutch accomplishes its purpose through a more exacting standard of close tolerances along with a new scheme of providing a closely controlled forced feed lubrication directly to all bearings and eliminating excess oil.

The Sta-Nu-Tral Clutch is interchangeable with clutches supplied in previous Nordberg gasoline marine engines, and it is possible to quickly convert engines now in use to the Sta-Nu-Tral clutch feature with a service replacement kit.

South Carolina to Seize and Sell Unlicensed Shrimp Trawlers

Any shrimp trawler, license for which has been suspended, may not trawl within South Carolina waters, the State Board of Fisheries has announced. Such vessels, if apprehended trawling, will be seized and sold.

The Board, meeting at its Charleston offices Oct. 6, adopted the following resolution: "Upon the conviction of any person under code section 3410 of the code of laws of South Carolina, 1942, which conviction shall be for an act involving the use of any boat which has been used in connection with an act resulting in a prior conviction under the same statute, the license for the operation of the said boat shall be suspended for a period of 15 days for the first offense, 30 days for the second offense and for the period of one year for each additional offense."

The Board's decision followed reports by inspectors of large numbers of trawlers violating the State laws by trawling in Bull's Bay, north of Charleston, and in the rivers and sounds near Beaufort. Some 43 cases have been made in these areas alone since July 1.

Code section 3410 provides for a fine of not more than $100 and or 30 days imprisonment for trawling within any stream, bay, sound or river within the State.

The statute governing licensing of shrimpers, passed during the last General Assembly, provides that a trawler may be seized and sold if found operating within State waters without a license.

CODFISH GEAR

MUSTAD HOOKS
PERFECTION BRAND TARRED LINE

Leads, bottle corks . . .
Get them all at Augur's

W. A. AUGUR, Inc.
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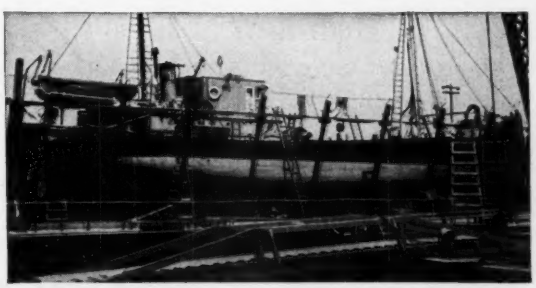
BEekman 3-0857

Trawler Repairs
in the Port of Boston



Bethlehem's two repair yards in Boston harbor, the Atlantic Yard and Simpson Yard, have unexcelled facilities for repairing, reconditioning and servicing trawlers efficiently and economically. The next time you need trawler repairs get in touch with Bethlehem.

BETHLEHEM STEEL COMPANY
Shipbuilding Division
ATLANTIC YARD
80 Border Street, East Boston 28
SIMPSON YARD
256 East Marginal Street, East Boston 28
Telephone: East Boston 4000

Fish Landings for Month of October

(Hailing fares. Figure after name indicates number of trips.)

NEW YORK

Felicia (1)	73,000	Portugal (3)	56,700
Katie D. (1)	62,000	Teresa & Jean (2)	126,700
Mary Ellen (1)	1,000	Virginia (2)	116,500

Scallop Landings (Gallons)

Beatrice & Ida (3)	2,300	Quest (2)	1,115
Benjamin Brothers II (2)	1,300	Rainbow (3)	2,200
Bright Moon (2)	1,350	Reid (2)	1,550
Buzz & Billy (3)	2,800	Richard Lance (3)	2,100
Catherine C. (2)	2,000	Rosalie F. (3)	2,700
David A. (1)	900	S #31 (3)	2,575
Florence B. (3)	2,900	St. Rita (3)	2,200
Friendship (3)	2,350	Sunapee (2)	1,600
Gloria F. (3)	2,550	The Queen (3)	2,450
Hazel S. (1)	400	Venture (1)	700
Major J. Casey (3)	2,350	Victoria (2)	1,300
Mary (1)	500	Whaling City (2)	1,650
Mary Ellen (2)	750	Wm. D. Mangold (2)	1,300

GLOUCESTER

Agatha & Patricia (1)	5,000	Lady of Good Voyage (3)	193,000
Agnes & Myrnie (7)	59,000	Lassgehn (3)	23,000
Albatross (2)	330,000	Leretha (2)	108,000
Alice Ann (2)	141,000	Little Flower (9)	129,000
Alvan T. Fuller (2)	203,000	Little Joe (4)	25,500
Alden (1)	1,000	Lois T. (4)	21,500
Anna Guarino (6)	60,000	Lorine (1)	80,000
Annie (4)	24,000	Louise (1)	95,000
Annie II (2)	21,000	Lousam (3)	14,000
Anthony & Josephine (7)	70,000	Mabel Mae (1)	180,000
Ariel (6)	69,000	Madame X (4)	36,000
Atlantic (3)	126,000	Madonna (2)	13,000
Austin W. (1)	49,000	Magellan (1)	89,000
Ave Maria (1)	106,000	Malolo (2)	104,000
Avocet (2)	9,500	Manuel F. Roderick (2)	205,500
Babe Sears (2)	244,600	Margie & Roy (5)	19,000
Baby Rose (1)	108,000	Maria Immaculata (7)	79,000
Barbara C. (4)	50,000	Marie & Winifred (1)	41,400
Benjamin C. (3)	583,000	Marion & Alice (2)	251,000
Bernie & Bessie (4)	40,000	Mary (8)	79,000
B. Estelle Burke (2)	145,000	Mary A. (6)	56,000
Bethulia (4)	51,000	Mary & Josephine (2)	370,000
Bonaventure (1)	105,000	Mary F. Curtis (2)	208,000
Brighton (2)	255,000	Mary Jane (2)	290,000
Cara Cara (1)	70,000	Mary Rose (2)	258,000
Carlo & Vince (4)	40,000	Mary W. (1)	16,000
Carol Ann (2)	290,000	Mother Ann (2)	362,000
Caroline & Mary (1)	125,000	Nancy F. (3)	45,000
Caspian (2)	51,000	Natale III (2)	31,000
Catherine Amirault (2)	315,000	New Bay (2)	270,000
Cecil W. (2)	54,000	Noah A. (4)	21,500
Charlotte M. (2)	202,000	No More (4)	48,600
Chebeague (2)	20,000	Novelty (8)	57,500
Cigar Joe (4)	33,000	Nyoda (4)	35,000
Clipper (1)	125,000	Olivia Brown (1)	53,000
Columbia (2)	334,000	Paul Howard (2)	268,000
Conquest (1)	142,000	Philip & Grace (2)	255,000
Curlew (1)	140,500	Pilgrim (2)	184,000
Dale (2)	9,000	P. K. Hunt (1)	135,000
Dartmouth (2)	199,000	Pollyanna (2)	219,000
Dawn (1)	5,000	Positive (1)	148,000
Dolphin (5)	552,000	Priscilla (3)	22,000
Doris F. Amero (2)	153,000	Puritan (2)	248,500
Eastern Point (7)	118,000	Raymonde (2)	191,000
Edith L. Boudreau (3)	112,600	R. Eugene Ashley (2)	140,000
Elizabeth A. (1)	5,000	Rita B. (1)	107,000
Emily Brown (2)	383,000	Ronald & Mary Jane (3)	453,000
Evalina M. Goulart (1)	50,000	Rose & Lucy (4)	42,000
Eva II (4)	41,500	Rosie & Gracie (3)	29,500
Evelyn A. (1)	6,000	Rosie C. (1)	4,000
Evelyn G. Sears (1)	2,000	Sacred Heart (5)	43,000
Falcon (8)	83,000	St. Anthony (2)	199,500
Felicia (2)	410,000	St. John (6)	51,500
Florence & Lee (1)	88,000	St. Nicholas (2)	328,000
Flow (1)	213,000	St. Peter (1)	15,000
Frances R. (5)	57,000	St. Peter II (2)	250,000
Frankie & Rose (5)	55,000	St. Providenza (8)	77,000
Gaetano S. (2)	254,000	St. Rosalie (1)	9,000
Gertrude E. (5)	26,000	St. Victoria (2)	146,000
G. N. Soffron (2)	77,500	Salvatore & Grace (1)	8,000
Golden Eagle (2)	209,500	Santa Lucia (6)	44,000
Hazel B. (1)	124,000	Santa Maria (2)	36,000
Helen M. (1)	25,000	Sea Hawk (2)	79,000
Hilda Garston (1)	169,000	Sea Queen (1)	40,000
Holy Family (1)	140,000	Sea Rambler (1)	35,000
Ida & Joseph (1)	15,000	Sebastiana C. (2)	46,000
Immaculate Conception (5)	69,000	Serafina N. (2)	23,000
Irma Virginia (8)	89,000	Serafina II (5)	66,000
Jackie B. (4)	39,000	Silver Bay (1)	120,000
Jackson & Arthur (3)	21,000	Skilligolee (3)	102,000
J. B. Junior (9)	93,000	South Sea (2)	80,000
Jennie & Julia (5)	71,000	Sunlight (1)	180,000
Jennie & Lucia (2)	67,500	Superior (2)	170,000
John (1)	5,000	Sylvester Whalen (2)	335,000
Johnny Baby (5)	35,000	Theresa M. Boudreau (2)	301,000
Joseph & Lucia (2)	246,000	Thos. J. Carroll (1)	150,000
Joseph S. Mattos (2)	160,000	Tina B. (2)	216,000
Josie II (5)	38,000	Trimembral (8)	79,000
Julie Ann (2)	285,000	We Three (9)	71,000
Junojaes (1)	159,000	Whitestone (1)	40,000
Killarney (2)	326,000	Wild Duck (2)	301,600
Kingfisher (1)	169,000	Win Story (3)	28,000

Scallop Landings (Gallons)

Hope (1)	122

PORTLAND

Alice M. Doughty (4)	117,200	Hustler (1)	15,600
Althea (3)	66,100	Lawrence Scola (2)	13,600
Andarte (1)	58,600	Lawson (3)	162,300
Araho (3)	195,400	Manchinoch (4)	129,300
Belle Isle (3)	90,300	Mary & Helen (1)	10,900
Cara Cara (1)	40,000	Nora Sawyer (1)	1,300
Carolyn & Priscilla (3)	82,500	Randolyn (4)	58,800
Chanco (1)	75,000	Resolute (3)	61,200
Cherokee (2)	86,600	Richard J. Nunan (2)	75,000
Clara Louise (1)	83,900	Silver Bay (1)	90,000
Courier (2)	63,100	Theresa R. (2)	255,000
Eagle (1)	171,000	Thomas D. (2)	202,700
Elinor & Jean (6)	119,300	Vagabond (3)	170,100
Ethelina (3)	119,600	Vandal (2)	168,000
Ethel V. Stowman (4)	101,600	Voyager (2)	56,900
Evzone (1)	58,800	Willard Daggett (1)	11,000

BOSTON

Acme (7)	74,200	Margaret & Marie (5)	44,100
Addie Mae (5)	50,400	Maria Del Soccorsa (7)	49,600
Adventure (L. Tr'ler) (3)	224,500	Maria Guiseppe (3)	14,600
Agatha & Patricia (2)	66,900	Marietta & Mary (3)	72,700
Alphonso (5)	41,400	Maris Stella (3)	193,100
American Eagle (3)	60,700	Marjorie (3)	49,400
Angie & Florence (3)	45,200	Marjorie Parker (2)	83,500
Annie & Josie (6)	63,200	Marsala (3)	77,800
Arlington (2)	133,200	Mary & Jennie (8)	69,100
Atlantic (2)	158,600	Mary W. (1)	19,300
Ave Maria (Dragger) (7)	60,600	M. C. Ballard (3)	161,600
Barbara C. Angell (1)	50,000	Michael G. (7)	78,400
Bay (3)	222,500	Michigan (2)	192,500
Billow (3)	222,200	Nancy B. (3)	59,300
Bonnie (2)	192,400	Nancy F. (1)	24,700
Breaker (2)	139,000	Natale III (2)	65,300
Breeze (3)	217,000	Neptune (3)	240,400
California (3)	72,800	Ohio (3)	193,500
Calm (3)	230,100	Olympia (4)	97,700
Cambridge (3)	211,600	Olympia La Rosa (3)	85,600
Carmela Maria (Dragger) (5)	98,900	Pam Ann (1)	43,500
Carmela Maria (L. Tr'ler) (3)	12,000	Paolina (1)	1,700
Catherine B. (Dragger) (3)	95,000	Phantom (3)	225,300
Catherine B. (L. Tr'ler) (3)	18,900	Phyllis & Mary (4)	74,400
Crest (3)	278,500	Pioneer (3)	25,000
Curlew (5)	48,800	Plymouth (2)	152,000
Diana C. (7)	86,400	Princess (6)	75,500
Dorchester (2)	154,600	Quincy (3)	198,500
Drift (2)	189,000	Racer (2)	146,500
Eddie & Lulu M.	45,800	Red Jacket (3)	293,700
Elizabeth B. (2)	119,800	Robert & Edwin (7)	42,000
Esther M. (3)	266,700	Roma (6)	66,300
Estrela (3)	200,300	Rosalie D. Morse (2)	126,600
Eva M. Martin (2)	5,900	Rosemarie (1)	16,500
Famiglia (3)	36,000	Rose Mary (4)	43,600
Fanny F. Hickey (7)	86,200	Rosie (7)	68,000
Flow (1)	160,000	Rosie & Lucy (1)	30,100
Flying Cloud (3)	346,500	Rush (3)	183,300
4-C-668 (1)	2,000	Sacred Heart (6)	45,000
4-C-688 (1)	3,100	St. Anna (5)	25,500
4-C-887 (2)	4,200	St. Francis (4)	44,600
4-E-885 (2)	4,400	St. Joseph (Dragger)	104,400
4-G-370 (2)	11,300	St. Joseph (L. Tr'ler) (2)	11,200
4-G-673 (3)	13,000	St. Michael Angelo (3)	25,700
4-H-823 (3)	19,200	St. Peter (1)	36,400
Francesca (4)	27,000	St. Rosalie (2)	43,500
Geraldine & Phyllis (2)	119,500	St. Theresa (2)	12,400
Gudrun (2)	90,600	Salvatore & Grace (2)	46,100
Helen M. (2)	57,300	San Antonio (3)	22,100
Hornet (6)	46,700	San Calogero (8)	79,300
Ida & Joseph (2)	67,300	Santa Maria (1)	44,400
Jackie B. (1)	18,500	Santa Rita (1)	9,200
J. B. Junior (6)	210,000	Santina D. (3)	37,200
J. B. Junior II (3)	29,600	Savoia (3)	22,200
Jennie & Lucia (1)	38,300	Sea Fox (1)	26,100
Joe D'Ambrosio (4)	32,200	Sebastiano & Figli (5)	43,800
Josephine (3)	18,300	Six Brothers II (2)	7,200
Josephine F. (2)	15,800	Surge (3)	268,900
Josephine P. II (3)	69,100	Texas (3)	142,600
Josie M. (5)	63,500	Thomas Whalen (3)	183,100
Leonard & Nancy (2)	68,100	Two Pals (4)	38,100
Leonarda (4)	19,100	Uncle Guy (4)	77,000
Little Nancy (4)	91,400	Wave (3)	325,200
Lorine III (2)	30,900	Weymouth (3)	174,400
Lucky Star (3)	200,600	Wm. J. O'Brien (3)	194,600
Lynn (3)	186,400	Winchester (3)	212,800
Madonna (1)	21,900	Winthrop (3)	196,700
Maine (2)	203,500	Yankee (3)	28,700

Scallop Landings (Gallons)

Mqonlight (1)	1,100

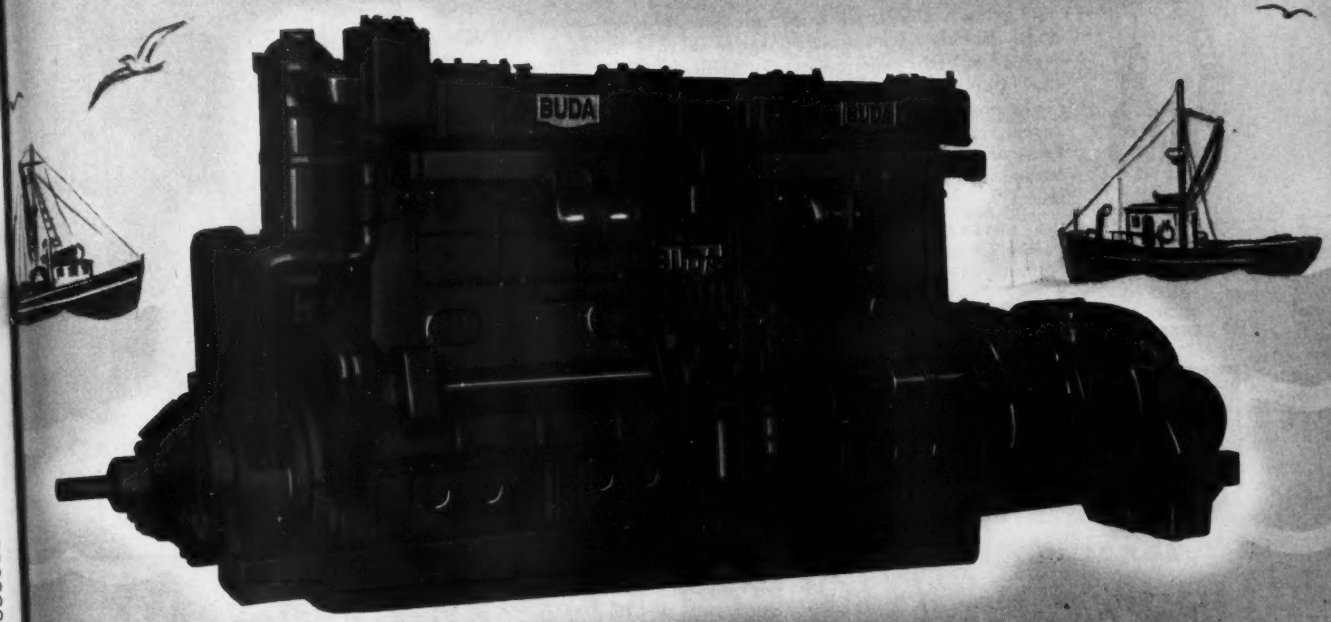
NEW BEDFORD

Adventurer (3)	60,500	Automatic (2)	5,100
Anna C. Perry (4)	81,600	Barbara C. Angell (2)	85,500
Ann & Marie (2)	7,000	Barbara M. (3)	65,300
Annie Louise (4)	50,000	Bozo (2)	6,400
Annie M. Jackson (1)	19,300	Brother Joe (1)	13,300
Arnold (3)	65,400	Cape Cod (1)	9,800
Arthur L. (3)	95,000	Capt. Deebold (3)	77,000

(Continued on page 46)

New "2505"

MARINE DIESEL



- **2505 Cu. In. Displacement**
- **230 HP at 900 RPM—340 BHP max. at 1200 RPM**
- **"Straight 8" Smoothness**
- **85% of Working Parts Interchangeable with 1879 Series Buda Marine Diesels**

See these new Diesels at New York Boat Show

Clip... Mail Today!

The BUDA COMPANY, Harvey, Ill.

☐ Send facts on new "2505" Marine Diesel

I may need _____ engines this size about _____ (date)

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BUDA

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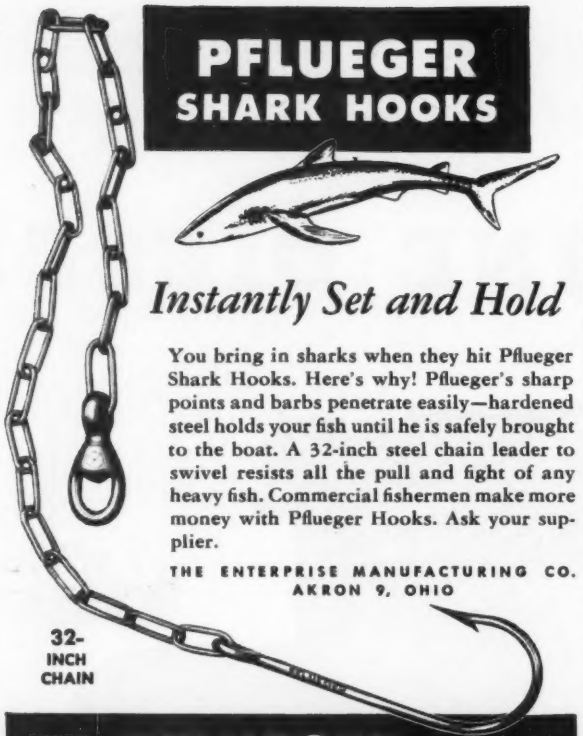


PFLUEGER
SHARK HOOKS

Instantly Set and Hold

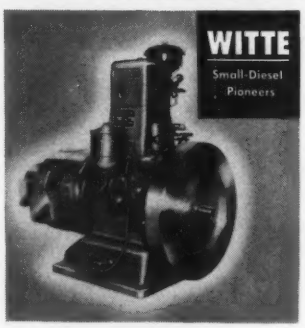
You bring in sharks when they hit Pflueger Shark Hooks. Here's why! Pflueger's sharp points and barbs penetrate easily—hardened steel holds your fish until he is safely brought to the boat. A 32-inch steel chain leader to swivel resists all the pull and fight of any heavy fish. Commercial fishermen make more money with Pflueger Hooks. Ask your supplier.

THE ENTERPRISE MANUFACTURING CO.
AKRON 9, OHIO

32-INCH CHAIN

PFLUEGER
(PRONOUNCED "FLEW-GER")
A GREAT NAME IN TACKLE

Low-Cost "24-Hour" Auxiliary Power



Witte Dieselectric Plant Model ADTEA

With a Witte Dieselectric Plant in your boat, you have a continuous, adequate supply of electrical power for lights, pumps, winches and all other auxiliary equipment.

Witte Dieselectric Plants . . . 3 to 7.5 KVA-AC, 2.4 to 6 KW-DC . . . consist of a Witte Diesel Power Unit and a direct-connected or belt-driven generator. They operate on the same low-cost diesel fuel as your main engines. They're made to give 24-hour service month after month with a minimum of attention.

The complete line of Witte Dieselectric Plants includes a size and style that will meet the requirements of your boat. See your Witte dealer or write for complete information and specifications.

WITTE ENGINE WORKS, DEPT. 0-11, KANSAS CITY 3, MO., U. S. A.
Division of Oil Well Supply Company

USS
WITTE DIESELECTRIC PLANTS and DIESEL POWER UNITS
UNITED STATES STEEL

(Continued from page 44)

Carl Henry (2)	61,600	Maria Julia (4)	54,300
Carole June (3)	106,800	Mary & Joan (2)	95,900
Catherine T. (3)	119,500	Mary & Julia (2)	85,000
Charles E. Beckman (4)	52,500	Mary Anne (3)	78,000
Christina J. (4)	78,300	Mary J. Hayes (2)	100,400
Clinton (3)	33,500	Mary M. (1)	4,100
Clipper (2)	92,500	Minnie V. (2)	19,500
Connie F. (3)	89,100	Molly & Jane (3)	59,300
C. R. & M. (2)	39,100	Noreen (3)	154,400
Dauntless (2)	38,500	Pam Ann (2)	80,800
Edith (2)	32,200	Paolina (2)	32,200
Elva & Estelle (4)	52,000	Patricia Ann (1)	5,400
Elva L. Beale (2)	6,300	Pauline H. (2)	129,000
Etta K. (4)	34,300	Penguin (3)	100,000
Eugene & Rose (3)	71,500	Philhasca (1)	5,000
Felicia (1)	44,600	Phyllis J. (3)	28,700
Frank F. Grinnell (2)	47,000	Princess (2)	24,900
Gannet (3)	105,900	Quest (1)	3,700
Gertrude D. (2)	40,000	Reliance (3)	10,600
Gladys & Mary (3)	108,100	Rosemarie V. (3)	56,400
Growler (3)	100,200	Sandra & Jean (3)	39,100
Helen B. (3)	75,000	Sea Fox (3)	52,000
Helen Mae (2)	6,300	Sea Ranger (2)	85,700
Invader (2)	49,100	Solveig J. (3)	135,900
Irene (2)	14,500	Southern Cross (3)	16,200
Ivanhoe (3)	83,300	Stanley B. Butler (4)	142,200
Jacintha (3)	148,300	Susie O. Carver (4)	50,500
Janet Elise (5)	34,000	Theresa & Jean (2)	75,800
Joan & Tom (4)	53,600	Two Brothers (NBD) (5)	39,200
Joan & Ursula (4)	134,400	Two Brothers (R.I.) (3)	34,800
John G. Murley (1)	51,000	Victor Johnson (3)	85,500
Josephine & Mary (2)	23,600	Viking (Chilmark) (3)	24,900
June Bride (4)	37,000	Viking (NBD) (3)	78,500
Katie D. (2)	95,700	Wamsutta (2)	71,500
Kelbarsam (2)	30,900	Whaler (3)	127,400
Little Joe (2)	10,800	Yankee (1)	6,100
Madeline (4)	34,300		

Scallop Landings (Gallons)

Abram H. (2)	1,800	Linus S. Eldridge (2)	2,150
Adele K. (2)	1,400	Louis A. Thebaud (2)	1,115
Agda (1)	500	Malene & Marie (3)	2,250
Alice J. Hathaway (1)	500	Malvina B. (1)	1,100
Alpar (3)	3,000	Marie & Katherine (2)	1,600
Amelia (1)	1,100	Marmax (1)	1,100
Antonina (1)	155	Martha E. Murley (1)	850
Barbara (1)	900	Mary Canas (2)	950
Bobby & Harvey (2)	2,000	Mary D'Eon (2)	900
Bright Star (3)	2,145	Mary J. Landry (1)	900
Camden (3)	2,075	Mary R. Mullins (1)	650
Carol & Estelle (2)	1,600	Mary Tapper (1)	1,000
Catherine & Mary (2)	1,600	Moonlight (2)	2,100
Charles S. Ashley (3)	3,100	Muriel & Russell (2)	1,800
Dagny (2)	1,575	Newfoundland (2)	1,300
Doris & Gertrude (2)	1,865	Olive M. Williams (1)	1,000
Dorothy & Mary (2)	1,100	Palestine (2)	1,900
Elizabeth M. (2)	2,200	Pearl Harbor (2)	2,200
Eunice-Lilian (1)	955	Pelican (3)	2,890
Fairhaven (1)	1,000	Porpoise (2)	1,700
Flamingo (3)	3,000	Red Start (3)	2,250
Fleet Wing (2)	2,200	St. Ann (2)	1,800
Four Sisters (2)	1,300	Sea Hawk (1)	450
Friendship (1)	1,000	Shannon (1)	850
Hope (1)	133	Smilyn (3)	2,600
Irene & Mabel (2)	1,425	The Friars (2)	1,600
Janet & Jean (2)	1,100	Ursula M. Norton (3)	3,150
Jerry & Jimmy (3)	2,167	Wm. D. Eldridge (2)	2,200
Kingfisher (2)	1,450	Wm. H. Killigrew (1)	1,100
Lainee K. (2)	960	Wm. J. Landry (1)	167

Swordfish Landings (No. of Fish)

Muriel & Russell (1)	2

New Dragger "C. R. & M."

(Continued from page 19)

propeller on a 4" Monel shaft, the engine gives the boat a speed of 11¾ knots at 850 rpm.

The main engine is fitted with a Maxim silencer and operates belt-driven 1½ kw. generator and 2½" centrifugal pump for deck wash and all bilges. A 2½" Edson hand deck bilge pump is located on deck.

The boat also has a 1BDM-3, 6 hp., 1500 rpm., 3 kw. Buda Diesel auxiliary generating unit. Batteries are 32-volt Exide. Fuel capacity of 1760 gallons is provided in two tanks either side of the engine room. Two fresh water tanks, each holding 200 gallons, are located under the fo'c's'le floor.

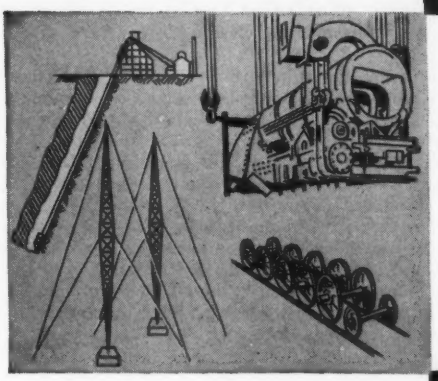
Hathaway Machinery Co. furnished their Model 1335-40 winch which winds 300 fathoms of ⅝" Roebling wire on each drum, as well as the geared steerer, gallows frames, stern bearing and stuffing boxes.

Pilot house equipment consists of a 7" Kelvin-White compass, Submarine Signal Fathometer, Clark Cooper fog horn, and RCA Model ET8037, 30-watt radiotelephone. The vessel is painted with Henderson & Johnson Gloucester paints and rigged with Columbian rope.

The *Shirley and Roland*, which is owned by Capt. Salvador and his brother Louis, is now being skippered by the latter.

SAME STORY

ashore and afloat



FROM COAST TO COAST, many colossal transmission towers are guyed by Roebling Wire Rope. Through shafts of the deepest mines, Roebling Wire Rope hauls heavy loads to the surface and conveys miners to and from their jobs. In plants, factories and construction work the country over, owners and operators specify Roebling Wire Rope for safe and economical hoisting and hauling.

As on land, so in marine service . . . Roebling Standing Rigging and Trawler Lines have long been an outstanding choice in the fishing fleets. There's a Roebling Wire Rope of the right size and construction for every purpose . . . flexible, tough, reliable and highly resistant to fatigue and aging.

A Roebling Field Man is ready to help you rig with the *right* wire rope for real dependability and low overall cost. Write or call him at your nearest Roebling branch office.

JOHN A. ROEBLING'S SONS COMPANY.
TRENTON 2, NEW JERSEY
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A CENTURY OF CONFIDENCE

JR ROEBLING

LATEST DESIGNS
of all forms of
FISH MACHINERY

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Manufacturers and Lessors of:

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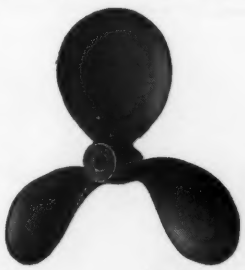
FISH MACHINERY CORP.
Subsidiary of Atlantic Coast Fisheries Co.
4 Fish Pier, Boston, Mass.
Edward W. Shattuck, President

The "High Liners" must have efficient, dependable equipment



52" and LARGER

Where lives as well as profits are at stake both owners and skippers realize the necessity of using propellers of proven quality. That is why you will find Hyde Propellers on the "high liners" of the fishing fleet. Let the experience of the men who know be your guide—specify Hyde.

HYDE
PROPELLERS

EFFICIENT . . . RELIABLE
ALWAYS GET HOME SAFELY

HYDE WINDLASS COMPANY, Bath, Maine

WESCO COD-END PROTECTOR

- Needs No Preservative
- Stays Clean and Pliable
- Can Be Left On Your Net

Right: Capt. Dominic Catanzaro and his Wesco Protector on the "Diana C." of Boston.

The Wesco Cod-End Protector will outwear 10 to 15 cod ends. Proven in actual use for 3 years, it has given 8 to 14 months' service, outlasting 20 to 25 salted green hides. Made with uniform holes punched, ready to attach to your net.

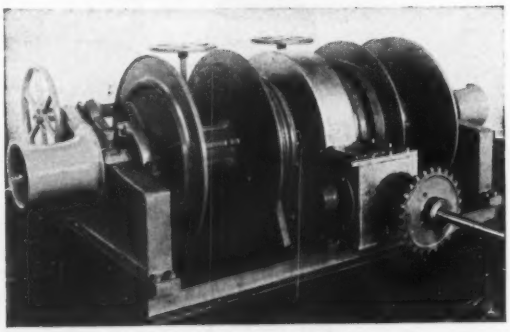
WESTERBEKE FISHING GEAR CO.

HEADQUARTERS FOR FISHING EQUIPMENT AND MARINE HARDWARE

279 Northern Ave., Boston, Mass.

Branch Store and Warehouse at Gloucester

Hathaway



MODEL NO. 1335-40

TEN SIZES OF WINCHES

Stern Bearings — Stuffing Boxes
Bronze and Monel Propeller Shafts

Fishing Machinery Repairs and Service

Fuel Oil — Ice — Lube Oil

HATHAWAY MACHINERY CO., INC.

HATHAWAY-BRALEY WHARF CO., INC.
FAIRHAVEN, MASSACHUSETTS

Gloucester Fish Prepared in School Lunch Demonstration

Representatives of Gloucester fish processing firms, managers and supervisors of school lunch programs in the city and neighboring communities, totalling upwards to 50, were present at a two-hour school luncheon demonstration held Oct. 31. The demonstration was conducted by Miss Jean Burtis, home economist of the Fish and Wildlife Service, who was accompanied by Burt E. Lindgren, New England director of education and market development for the Fish and Wildlife Service, and Mrs. Bethel B. Ross, executive secretary of the School Lunch Division of the State Department of Education. Managers and school lunch supervisors were present from Boston, Lynn, Essex, Malden and Beverly.

Miss Burtis explained the various species of fish, pointing out the nutritive values, and then proceeded to prepare five fish dishes, using redfish fillets and canned flaked fish. She explained each dish separately, and those present sampled the dishes after they had been cooked. They also had their first opportunity of sampling the new tuna frankfurters which are to be made by Davis Brothers Fisheries Co., Inc.

The demonstration, purpose of which was to show how easily fish can be prepared in appetizing menus as part of the Federal aided school lunch programs, was the first in a series to cover the entire State of Massachusetts and later New England. Similar demonstrations presently are going on in four widely separated States over the country.

"Beatrice and Rose" Total Loss

The 104′ mackerel seiner *Beatrice and Rose*, which caught fire November 4 off Thacher's Island, Rockport, is a total loss. The fire, believed to have started in the engine room, swept the section aft of the pilot house, forcing the crew to abandon ship in a motor seine boat.

With the aid of other craft including the US Coast Guard lifeboat, the crew finally managed to beach the seiner on Niles Beach at Brace's Cove, where the fire was brought under control. However, as a result of having broken her back when she was beached, the craft is a complete loss. The boat, a converted World War I subchaser built at Brooklyn, N. Y., was owned by Capt. Gerome T. Frontiero.

"Cara Cara" New to Gloucester

A newcomer to Gloucester is the North Carolina dragger *Cara Cara*, whose skipper is Capt. Henry Huggett. The vessel, which has been fishing out of Rockland, Me. this Summer, has been purchased by Rocky Bay Fish Co., where she landed her first redfish fare in Gloucester on Oct. 24.

Whiting Fleet Has Long Season

The whiting fleet operated later than usual this season. The craft ordinarily are through the last of September, but the fish were still present in October this year. Catches over the second week-end in October totalled more than 150,000 lbs. of dressed fish.

Big Trips

Big trips landed at Gloucester during October included the following: *Benjamin C.*, 200,000 lbs.; *Killarney*, 200,000 lbs.; *Albatross*, 170,000 lbs.; *Emily Brown*, 193,000 lbs.; *Columbia*, 174,000 lbs.; *Mary & Josephine*, 200,000 lbs.; *Theresa M. Boudreau*, 195,000 lbs.; *Felicia*, 210,000 lbs.; *Julie Ann*, 180,000 lbs.; *Mabel Mae*, 180,000 lbs.; *Sunlight*, 180,000 lbs.; *Flow*, 213,000 lbs.; *Mother Ann*, 190,000 lbs.; and St. Nicholas, 180,000 lbs.

Redfish landings were good on Oct. 31, with fifteen draggers hailing for 1,400,500 lbs. The Gloucester fisheries are in their 11th year of redfish production. The supply has kept up well this year, being only a little more than 1% less than that of the record year.

Land Halibut, Scallops

The dragger *Manuel F. Roderick* landed 1,500 lbs. of halibut at Gloucester on October 4, and received 30c per pound for the fish. Also included in the trip were 85,000 lbs. of redfish.

The New Bedford dragger *Hope* arrived in Gloucester Oct. 19 with the first trip of scallops for that port in a long time. They had 1,100 lbs. aboard.

Double-Clawed Lobster Taken

Joseph Padre, Gloucester lobsterman, got a lobster with a double claw besides its other good claw in his trap off Good Harbor Beach October 31. The double claw was on the right, and was marked as the others. It had the fine sawtooth arrangement, though it was smaller than the main active claw.

Ipswich Torchers Make Big Herring Catches

Large boatloads of herring were being landed nightly the end of October by the torchers at Ipswich. The fish were sold to the General Seafoods dehydration plant at Woburn.

Get New Batteries

The 80′ dragger *G. N. Soffron,* owned by John Burke and skippered by Capt. Everett Vannah, is being fitted with a new set of 8HHG-25 Surrette 32-volt batteries. An 8HHG-21, 32-volt Surrette set has been placed aboard the 53′ *Trimembral,* Capt. Sam Santuccio. A new 6HHG-21, 30-volt Surrette battery installation has been made in the dragger *Cara Cara.*

Surrette Supply Co., Peabody, Mass., warehouse distributor of Winslow filters, has appointed two new dealers for the Winslow line: City Oil Company of East Gloucester and Harbor Marine Service, 72 N. Commercial Wharf, Boston.

To Study Brown Scallops

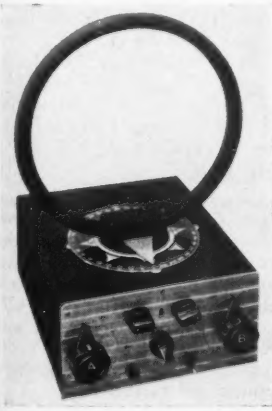
Dr. David L. Belding, shellfish expert, and his assistant, J. Arthur Posgay, of the Woods Hole Oceanographic Institution, working under contract with the Massachusetts Division of Marine Fisheries, have started a program of sea scallop research. At present there is virtually no scientific knowledge of the life history or biological data available for the improvement of the scallop fishery.

A special effort will be made to investigate the brown sea scallops to determine the causes of discoloration and to discover a method of utilizing them in the future.

B. E. Lindgren of the U. S. Fish & Wildlife Service, also working cooperatively with Massachusetts agency, is currently investigating the possibility of utilizing sea scallop rims and bodies which now are discarded. It is hoped that a practical and economical by-product can be developed to increase the scallopers' take-home pay.

Scallop fishermen again have been requested to avoid bringing in brown scallops by Francis W. Sargent, director of the Massachusetts Division of Marine Fisheries.

The brown scallops show up in autumn landings, and last year they created noticeable sales resistance among consumers who expect scallops to be white. However, there appears to be no indication that the brown scallop is unsuitable for human consumption.



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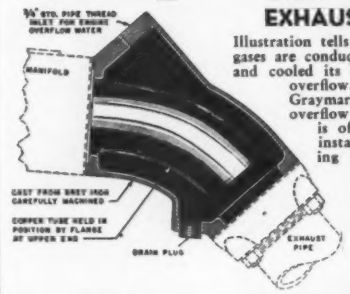

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Vineyard Bailings

By J. C. Allen

Since we were the height of a boom-crotch we have known oldtimers of all ages who would shake their heads and say that everything was different in the old days, referring to every cussed thing under the sun. We never expected to see anything like those old stagers told about, but now, as we approach the sere and yellow leaf, as the poet said, we are not too darned sure about it.

October, which lies just astern as we write up this log, came about as close to the description of the old-timers as anything we have ever seen, and we have been around for some time.

We wouldn't say that dragging picked up any. As a matter of fact the reports from here and there indicate another slump in all varieties of fish taken with ground-twine. Nobody should be surprised at this. We haven't had any figures from the Coast Guard on vessel registrations since early in the year, and yet, despite the bunch of vessels lost, sold, burned, and otherwise disposed of, it would be our guess that we still have a helluva lot more of 'em fishing off the New England coast than we had before the late unpleasantness, and they are scraping as hard as ever, maybe harder.

Much Weight in Striped Bass

But a change has come about, or maybe it would be more correct to say that it is in process, and it looks very much as if some of the fish that were common in grandfather's day are coming back. We haven't had as much weight in striped bass marketed in 50 years or more. Of course, nobody attempts to really go after these fish in a commercial way because the penalty is about equal to that for manslaughter. Even though our Government distributes bales of literature to show that seven-eights of the world is starving to death, it has no effect upon the Massachusetts law on striped bass. There may be some sense to this; personally, we would say that to eat striped bass is only a degree or so better than starving, but plenty of people feel differently about it.

Many Bluefish

We have not seen as many bluefish, nor as large fish, for many a moon, and our gang can only be excused for not marketing more because of the fact that nobody is rigged for taking them. Our neighbors on Nantucket Island take a different slant at shore fishing and we have a record of one and a half tons of blues coming to market from that Island in one shipment. This is really something to think about.

Tauthaug Demand Brisk

We have also to report for October, that the tauthaug, some times called blackfish, are running deep in every damp spot, and whereas they are normally a fish that is popular only for a brief time in Mid-Winter, the demand has been brisk and the price good all the Fall.

Good Season for Eelers

Also, and this is quite encouraging, as we see it, things point to the best season in years for the eelers. The eels are large and plentiful, and the price has been good all the fall.

Adding these things all up, things look better for shore fishermen than they have for quite a spell. We wouldn't want to say that the future of fishing lies in shoal water, because it probably doesn't. But that is where it started and that is where the heft of the money was made in olden times.

Fall Fishing Late

All Fall fishing is two to three weeks late this year because of warm weather and warmer water. One gale, not too violent, shook things up during the middle of the month, but brought no real drop in temperature. Prospectors on the ledges hailed plenty of cod, and good ones, but sharks bothered them, and they don't expect anything different until the water cools off.

Mainland shell-fishermen opened their scallop beds early, and somehow managed to move their catch. Our lads won't do any scalloping until November, and if the weather remains warm, they may postpone the business still further.

New Brunswick Report

By C. A. Dixon

Just before October bowed itself out a topping run of full tides put at least a temporary crimp into the different fishing activities in southern New Brunswick. The catch of sardines which had been fairly productive in certain areas in Charlotte County, with Deer Island leading the other districts, dwindled to minimum landings for a week or so. A hoped-for development of a Fall school of sardines sufficient for packing requirements failed to materialize although there had been even record catches made along the Deer Island shore in some of the weirs. The dispersal of the fish schools through tidal conditions or natural causes made a sub-normal sardine pack certain in the Canadian factories. Considerable quantities of fish were sold to Maine concerns who enjoyed an additional supply from fishermen along the Maine coast, which kept the Eastport and Lubec factories busy night and day for a period.

During the latter part of the month some sardines were being caught at Grand Manan, and the factories there, including the plant of B. H. Wilson Fisheries (Canadian) Ltd., at North Head had a real active Fall business period which went a long way in augmenting the 1949 stock of canned sardines. Besides the Wilson plant at North Head, there is the Grand Manan Products, Ltd., North Head, and the Seal Cove Canning Co., at Seal Cove on the opposite end of the island. For many decades past, Grand Manan has been the chief center of the Canadian smoked herring industry, although in recent years this industry has been largely decentralized, smoked herring products being put up in various sections of New Brunswick and Nova Scotia.

Prepare for Fall Lobstering

In recent weeks there has been much activity at Grand Manan and elsewhere in southern New Brunswick in connection with preparations for Fall lobster fishing which commences on November 15. While speculation as to lobster production this Fall is of a wary kind among the fishermen, due to disappointment over the 1948 overall catch, it is predicted by some that better fishing will be enjoyed this year due to weather conditions which have been favorable for the retention of lobsters in inshore areas. There have been very few strong gales this Fall and the weather has been very mild. It is believed that more lobster traps will be set this year, as many who usually depend on other branches of fishing, such as sardine fishing and fishing for groundfish, have been forced to turn to lobstering, due to the comparative failure of line fishing and weir fishing in some places.

Pollock fishing did not pan out well in spite of the fact that squid bait was made obtainable at Campobello, one of the chief centers of production for pollock. For a while some of the boats landed fairly good catches, but the overall catch was sub-normal. The United States market was calling for slack-salted pollock this Fall, and it might well have been possible that a rebuilding of a demand for this kind of fish would have resulted, had production been sufficient to encourage buying.

Fishermen at Malloch's Beach, Campobello, are pleased over the action of the Federal Government of Canada in providing an adequate extension to the public wharf of the community where the fishing fleet has assumed much larger proportions than formerly. The enlarged breakwater-wharf will now provide shelter and protection for fishing boats owned at North Road village. It seems the Federal Government has been well advised as to the need of this port. The policy of the Government for many years has been that of building wharves and breakwaters at almost every harbor and cove of importance.

Toward the end of October several motor vessels from Nova Scotia made additional trips to southern New Brunswick for cargoes of barrelled lobster bait, bringing with them hundreds of barrels each, and buying the sardine herring from fishermen at Campobello, Deer Island and Grand Manan. Some of the vessels made several trips this Fall. The price paid for the bait was the same as that received for sardines, namely $20.00 a hogshead. A percentage of mackerel was taken with the sardines.

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*Northill Co., Inc., Los Angeles 45, Calif.

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Kaar Engineering Co., Palo Alto, Calif.
Pilot Marine Corp., 39 Broadway, New York 6, N. Y.
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Universal Motor Co., 436 Universal Drive, Oshkosh, Wis.
*Witte Engine Works, Kansas City 3, Mo.

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*Kermath Manufacturing Co., 5896 Commonwealth Ave., Detroit 8, Mich.
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*Lister-Blackstone Inc., 420 Lexington Ave., New York 17, N. Y.
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Sounding-Lead

(Continued from page 9)

linquishing of all ownership, right and title to the property. A wreck is not abandoned to any person, agency or the United States; an abandoned wreck has no owner.

Usually abandonment is accomplished by an owner declaring his intent in a letter to the Corps of Engineers.

NEW FLOAT FOR TRAWLS—A new type of float for herring trawl nets has been invented by two Swedish men. Built on the lines of a hydroplane, the faster the float is drawn through the water, the greater its lift, directly opposite to the operation of the present glass-ball floats which lose lifting power with increased speed. The new float has been thoroughly tested in the tank of the Ship Testing Institute and in actual use at sea on the Government's inspection ship, the *Eystrasalt*.

The float looks like a toy speed boat. It is approximately 9" in width, and 15" in length. The bottom is shaped like the "V" of a speed boat, while the top is streamlined like an airplane wing. At the "stern" there are two rudders, one horizontal and one longitudinal. In the center of the "keel' is a fastener, and a line runs from it to the trawl net.

It would be possible to make similar planes for the lower lip of the trawl net mouth which could be constructed to cut downwards. These would reduce the weight of the leads necessary to keep the lower section down.

The new float has already been registered as an invention and the owners plan to enter foreign markets by granting rights to manufacture on a royalty basis.

The models used in developing the float have been made of wood or light metal, but plastic probably will be used when it gets into production.

FISHERIES COUNCIL FOR MEDITERRANEAN—A six-country conference was held recently in Rome at the European Regional Office of FAO for the purpose of establishing a General Fisheries Council for the Mediterranean. The delegates unanimously accepted a draft agreement for the establishment of a regional council for the scientific exploration of the sea in the Mediterranean Sea and contiguous waters. It was to be referred to the Annual Conference of FAO in November, and then submitted to interested FAO Member Countries. If ratified by five of them, it will become effective. The meeting was attended by delegates from France, Greece, Italy, Lebanon, Turkey, and Yugoslavia.

The status of the forthcoming General Fisheries Council for the Mediterranean is on the whole analogous to that of the Indo-Pacific Fisheries Council and calls for co-ordinating of research and recommending to Member Governments measures necessary to make the best possible use of the resources of the sea.

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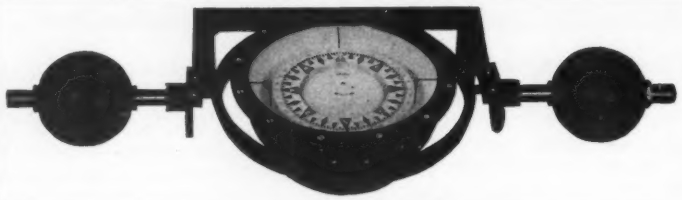

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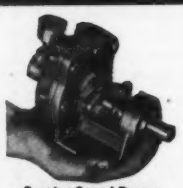

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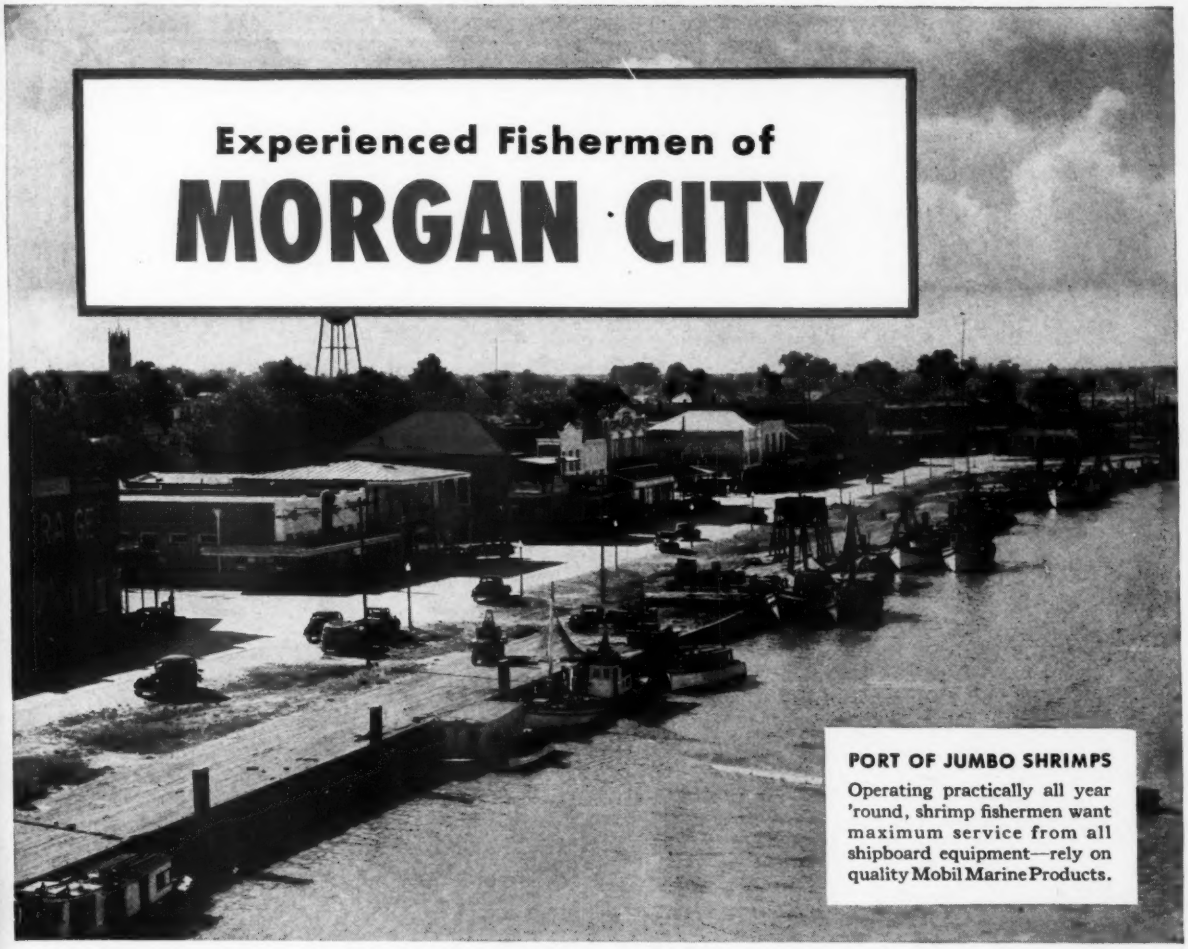
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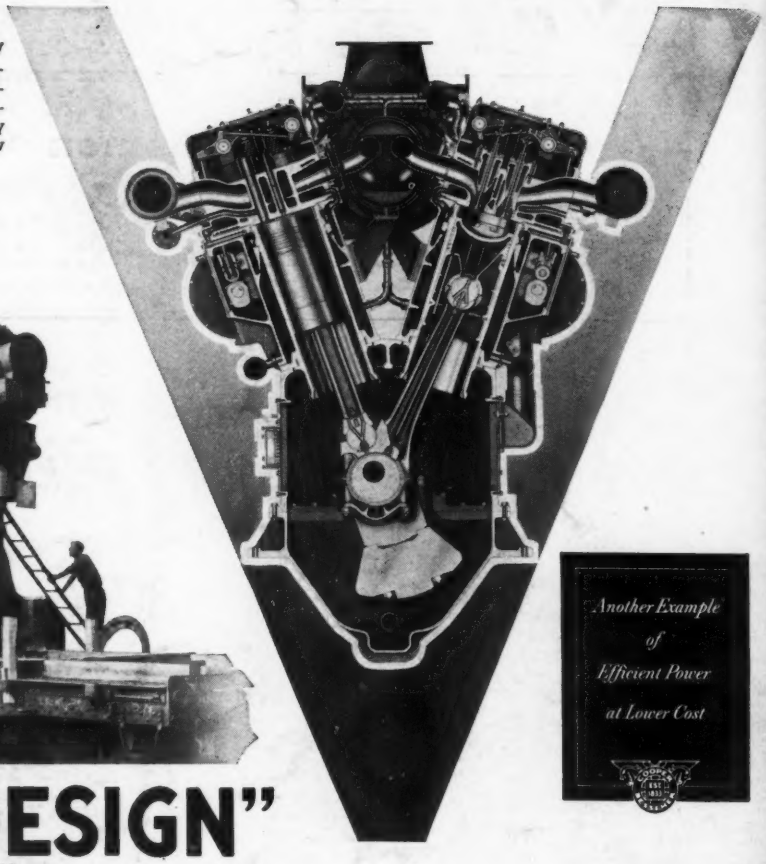

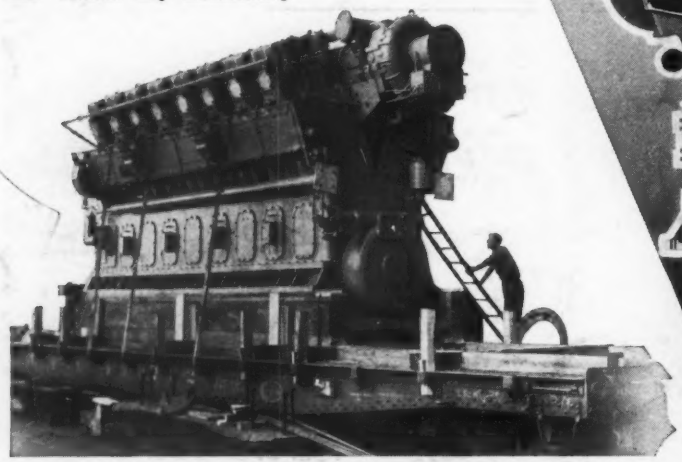

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